Cinchona

Mexico

Field notes

~~Fred Clarke~~ 88

Dr. Motley
Division of Plants.

4/7/44

Notes on 1922 Ju

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FOREIGN ECONOMIC ADMINISTRATION

Colombian Cinchbnn Mission **1944**
Plant Collection Number List

Ha rold St. John

Note: Blank spaces in the list following fulll data indicate ditto marks or that the data is the same as for the previous entry. Common names are in quotes.

Number	Name	Locality	Date
20501	Ruppia	Paiba, Boyacá	May 7, 1944
20502	Solanum	Apulo, Rio Bogota, Cundinamarca	June 12, 1944
20503	Ruellia tuberosa		
20504	Ruellia obtusa		
2 0505	Solanum crotonifolium		
20506	Tournefortia hirsutissima		
20507	Guazuma ulmifolia var. tomentosa		
20508	Capparis odorotissima	Apulo, Rio Apulo, Cundinamarca	June 13, 1944
20509	Casearia nitida		
20510	Croton leptostachys		
20511	Malpighia glabra		
2 0512	Cassia	Ubaque, Cundinamarca,	June 17, 1944
20513	Cassia	Choachí, Cundinamarca,	June 17, 1944.
20514	Cavendishia cordifolia	Páramo de Cruz Verde, 15 Km. S. of Bogotá, Cundinamarca	June 17, 1944
20515	Macleania rupestris		
20516	Carica candaramarcensis	Bogotá, Cundinamarca	June 22, 1944
20517	Cuphea dipetala	1 Km. N. of Sibaté, Cundinamarca	June 23, 1944
20518	Monina		
20519	Dodonaea viscosa		
20520	Peperomia		
20521	Lupinus		
20522	Nertera granatensis		
20523	Acanthaceae Besleria?		
20524	Begonia magnifica		
20525	Gunnera scabra		
20526	Jamesonia		
20527	Liabum		
20528	Fuchsia		
20529	Columnea		
20530	Palicourea	on road, 15 Km. N. E. of Fusugasugá, Rio Subiita, Cordillera Oriental, Cundinamarca	June 23, 1944
20531	Palicourea		
20532	Palicourea		
20533	Ciparouna		
20534	Carica candaramarcensis	Bogotá, Cundinamarca	June 24, 1944
20535	Compositae	San Cristobal, Bogotá, Cundinamarca,	June 25, 1944.
20536	Stachytarpheta	1 Km. N. of Cite, Cordillera Oreintal, Santander	June 28, 1944.
20537	Melastomaceae	13 Km. S. of Oiba, Cordillera Oriental Santander,	June 28, 1944

20538 Cassia — 18 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20539 Baccharis
20540 Vismia
20541 Myrsine
20542 Melastomaceae — 14 Km. S. of Socorro, Cordillera Oriental, Santander, June 28, 1944

20543 Compositae
20544 Leonotus — Pescadero, Rio Chicamocha, Cordillera Oriental, Santander, June 28, 1944.

20545 Tournefortia
20546 Tournefortia
20547 Moraceae
20548 Brickellia
20549 Adiantum — 3 Km. E. of Boca de Chucurí, Rio Sogamoso, Cordillera Oriental, Santander, June 29, 1944
20550 tree; lvs. alt.; fr. like acorn
20551 Psychotria
20552 Remijia pedunculata (with bark sample) — "Quina colorada", Filo de Lemir, La Putana, Cordillera de La Paz, Santander, July 6, 1944
20553 Remijia pedunculata — "Quina colorada" (with bark sample)
20554 Bromeliaceae — cascade of Quebrada Boquerona at confluence with Quebrada La Putana, Cordillera de La Paz, Santander, July 7, 1944.
20555 Isertia or Cassupa
20556 Rubiaceae
20557 Psychotria
20558 Lobeliaceae vine
20559 Gesneriaceae
20560 Palicourea
20561 Gentianaceae — W. side of Cordillera de La Paz, summit of Llana-Boquerona trail, Santander, July 7, 1944.
2 0562 tree lvs. opp. cor. gam. — Quebrada Llana, E. side Cordillera de La Paz, Santander, July 7, 1944.
20563 Cephaelis — near summit, W. side of Cordillera de La Paz, Quebrada Boquerona, Santander July 7, 1944.
20564 Sphagnum
20565 Acanthaceae
20566 Remijia pedunculata (with bark sample) — "Quinon" Finca Maravilla, Las Cruces, 3 Km. E. of San Vicente de Chucurí, Cuchilla del Ramo, Santander, H. St. John & Damaso Ramirez, July 5, 1944
2 0567 Remijia pedunculata (with bark sample) — "Quina roja" Alto de Consuelo, Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 19, 1944.
20568 Remijia pedunculata — "Quina roja" (with bark sample)
20569 Remijia pedunculata — "Quina roja" (with bark sample)
20570 Euphorbiaceae
20571 Ladenbergia — "Quinon"(with bark sample)
20572 Liliaceae — Filo Lorene, E. side of Cordillera de La Paz, Santander, H. St. John, July 20, 1944

20573 Pentagonia — Filo Lorene, E. side Cordillera e La Paz, Santander, H. St. John, July 20, 1944.
20574 Isertia or Cassupa (Bark sample) — Filo de Alto Viento, E. side Cordillera de La Paz, Santander, H. St. John & Gustavo Arcila, July 21, 1944
20575 Remijia pedunculata (Bark sample) — "Quina colorada" ridge between Filo de Alto Viento and Auebrada La Honda, E. side of Cordillera de La Paz, H. St. John & Gustavo Arcila, July 21, 1944
20576 Remijia pedunculata — "Quina colorada" (Bark sample)
20577 Palicourea — Filo de Alto Viento, E. side of Cordillera de La Paz, Santander, H. St. John July 21, 1944.
20578 Scrophulariaceae
20579 Cephaelis brachiata
20580 Gonzalagunia
20581 Rubiaceae
20582 Rubiaceae
20583 Psychotria
20584 Passiflora — Quebrada La Llana, Nuevo Mundo, Cordillera Oriental, Santander July 25, 1944.
20585 Rubiaceae
20586 Gesneriaceae near Saint-Paulia
20587 Apocynaceae
20588 Vismia — "Manchador" Quebrada Angulo, 4 Km. S. of Lebrija, Cordillera Oriental, Santander, July 29, 1944
20589 Vismia
20590 Jussiaea
20591 Compositae Brickellia?
20592 Rubiaceae
20593 tree, superior ovary
20594 tree monoecious — "machanillo"
20595 Clusia — "gachi"
20596 Orchidaceae
20597 Separuna
20598 Melastomaceae
20599 Cephaelis
20600 Solanaceae
20601 Rubiaceae
20602 Piper — 4 Km. S. of Cantabria, Cordillera Oriental, Santander, July 29, 1944
20603 Solanum tree
20604 Melastomaceae shrub, páramo, 15 Km. W. of Berlin, Cordillera Oriental, Santander, July 30, 1944.
20605 Senecio
20606 Xyris
20607 Espeletia
20608 Begonia — páramo, 8 Km. E. of Berlin, Cordillera Oriental, Santander, July 30, 1944
20609 Calceolaria
20610 Viola
20611 Galium
20612 Gunnera
~~20613~~

20613 Lobeliaceae ~~subparamo~~, subparamo, 5 Km. E. of ---- -
20614 Calycophyllum hirsutus "Quinon" ridge S. E. of Esmeralda, S.side of Rio Sogamoso, Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 2, 1944
20615 Remijia pedunculata "Quina blanca" (Bark sample)
20616 Remijia pedunculata "Quina blanca" (Bark sample)
20617 Remijia pedunculata "Quina blanca" (Bark sample)W. side of main ridge, Cordillera de La Paz, S. side of Rio Sogamoso, Santander, H. St. John & G. Arcila July 2, 1944.
20618 Remijia pedunculata "Quina blanca" (Bark sample)
20619 Remijia pedunculata "Quina blanca" (Bark sample) N. W. end of Cordillera de La Paz, S. of Rio Sogamoso, Santander, H. St. John & G. Arcila Aug. 2, 1944
20620 Remijia pedunculata "Quina blanca" (Bark sample)
20621 Remijia pedunculata "Quina blanca" (Bark sample) W. side of N. end of Cordillera de La Paz, S. side of Rio Sogamoso, S. E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 3, 1944.
20622 Remijia pedunculata mass collection of sterile branches of 20621
20623 Remijia pedunculata mass collection of flowers of 20621
20624 Remijia pedunculata mass collection of fruit of 20621
20625 Remijia pedunculata "Quina blanca" (Bark sample)
20626 Remijia pedunculata "Quina blanca" (Bark sample)
20627 Remijia pedunculata "Quina blanca" (Bark sample) Filo San Pablo, S. end of N. part of Cordillera de La Paz, E. of Esmeralda, Santander, H. St. John & G. Arcila, Aug. 4, 1944
20628 Remijia pedunculata "Quina blanca" (Bark sample)
20629 Remijia pedunculata "Quina blanca" (Bark sample)
20630 Remijia pedunculata "Quina blanca " (Bark sample)
20631 Leguminosae tree red fl; "Arisá"
20631 Passiflora "Granada"
20633 Remijia pedunculata "Quina" (Bark sample) W. side of Cerro de Santa Barbara, Quebrada, Caimana, drainage of Rio Sucio, N. half of Cordillera de La Paz, H. St. John & G. Arcila, Santander, Aug. 12, 1944
20634 Remijia pedunculata "Quina tuna" (Bark sample) W. side of Cerro Arenosa, Quebrada Arenosa, drainage of Rio Sucio, N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 14, 1944
20635 Ladenbergia "Quina tuna" (Bark sample)
20636 Ladenbergia "Quina tuna" (Bark sample)
20637 Remijia pedunculata "Quina tuna" (Bark sample)
20638 Remijia pedunculata "Quina tuna" Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 15, 1944.
20639 Remijia pedunculata "Quina tuna" (Bark sample) W. side Alto Frio, W. of Naranjo, Cordillera de La Paz, Santander, H. St. John & G. Arcila, Aug. 15, 1944.
20640 Remijia pedunculata "Quina tuna" (Bark sample)

20641 Calycophyllum "Quinon" (Bark sample) Quebrada Caimana, drainage of Rio Sucio, W. side of N. half of Cordillera de La Paz, Santander, H. St. John & G. Arcila Aug. 16, 1944

20642 Remijia pedunculata "Punta de lanza" (Bark sample) Filo San Carlos, N. end of N. half of Cordillera de La Paz, 5 Km. S. of El Volador, Santander, H. St. John & G. Arcila Aug. 17, 1944.

20643 Remijia pedunculata "Punta de lanza" (Bark sample)

20644 Remijia pedunculata "Punta de lanza" (Bark sample)

20645 Cattleya Arenal, Chicamocha Valley, Cordillera Oriental, Santander, H. St. John Aug. 19, 1944.

20646 Cattleya

20647 Rubiaceae Quebrada El Pato, El Cidro, Rio Pómera, 11 Km. E. of Moniquirá, Cordillera Oriental, Boyaca, Aug. 20, 1944

20648 Solanum

20649 Solanaceae

20650 Galinsoga

20651 Rubiaceae

20652 Palicourea

20653 Piper

20654 Compositae

20655 Solanum

20656 Solanum

20657 Rubiaceae

20658 Ericaceae

20659 Rubiaceae

20660 Cucurbitaceae

20661 Bomarea

20662 Araceae

20663 Begonia

20664 Liliaceae? "Guiche"

20665

2 0670 Ericaceae "Uva" valley of Rio Pómera, 13 Km. E. of Moniquirá, Cordillera Oriental, Boyacá, Aug. 20, 1944

20671 Ilysanthes La Cumbre, 14 Km. N. W. of Arcabuco, Rio Pómera, Cordillera Oriental, Boyacá, Aug. 20, 1944

20672 Orchidaceae

20673 Bignoniaceae canyon of Rio Pómera, 13 Km. N. W. of Arcabuco, Cordillera Oriental, Boyacá, Aug. 20, 1944

20674 Habenaria

20675 Compositae shrub

20676 Leguminosae, vine black buds

20677 Bromeliaceae

20678 Solanum 12 K. N. W. of

20678 Gentianaceae, shrub fl. yellow) specimen to be destroyed

20679 Zygophyllaceae ?

20680 Thalictrum podocarpum male 8 Km. N. W. of

20681 Thalictrum podocarpum female

20682 Potamogeton

20683 Galinsoga parviflora 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944

20684 Galinsoga
20685 Compositae
20686 Capparis
20687 Galinsoga caracasana 4 Km. S. of Cota, Bogotá Sabana, Cundinamarca, Aug. 27, 1944.

20688 Galinsoga
20689 Hedyotis 2 Km. N. of Combita, Valley of Rio Grande, Cordillera Oriental, Boyacá, Sept. 1, 1944.

20690 Vernonia ?
20691 Ericaceae
20692 Lycopodium
20693 Vicia
20694 Halenia
20695 Hypericum
20696 Castilleja
20697 Antennaria
20698 Orthosanthes chimboracensis
20699 Orthocarpus
20700 Orchidaceae
20701 Ageratum ?
20702 Ranunculus
20703 Poa
20704 Compositae
20705 Vallea?
20706 Rubus
20707 Acaena
20708 Labiatae
20709 Hypericum
20710 Hypericum
20711 Ericaceae
20712 Ericaceae
20713 Compositae Actinea ?
20714 Compositae yellow
20715 Erigeron
20716 Myrsine
20717 Croton Canyon of Rio Chicamocha, opposite Pescadero, Cordillera Oriental, Santander, Sept. 1, 1944.

20718 Verbenaceae
20719 Solanum
20720 Funastrum pubescens
20721 Amphilophium near paniculatum
20722 Salvia near bogotensis
20723 Calotropis procera
20724 Cuscuta Matanza, Rio Surata, Cordillera Oriental, Santander, Sept. 7, 1944
(24 Senecio remembered as 20736)

20725 Porophyllum ruderale 13 Km. above mouth of Rio Surata, Cordillera Oriental, Santander, Sept. 8, 1944

20726 Pilea serpyllaceae of microphylla?
20727 Malpighiaceae
20728 Leguminosae vine
20729 Malpighiaceae vine

20630 Bocconia frutescens 25 Km. above mouth of

20731	Salix Humbotdtiana	
20732	Paullinia	
20733	Dioscorea polyonoides	
20734	Boehmeria caudata	
20735	Chamaefistula angustata	
20736	Senecio	
20737	Weinmannia	"Cascara" Pais, Rio de La Baja, Cordillera Oriental, Santander Sept. 13, 1944
20738	Barnadesia spinosa	"Espino tate quieto"
20739	Compositae	"jarilla"
20740	Ericaceae	"Sepo"
20741	Compositae	"Guarguin" Motocoro, 2 Km. S. of Vetas, Rio Surata, Cordillera Oriental, Santander, Sept. 15, 1944
20742	Baccharis	"Laurel"
20743	Monina	"Añil"
20744	Lauraceae?	
20745	Apium ?	"Apio páramo"
20746	Compositae	"Arnica"
20747	Myrsine	"Bordon"
20748	Compositae	"Pajarilla negra"
20749	Calceolaria	"Jeta de caballo"
20750	Compositae	"Ventocidad"
20751	Senecio	
20752	Lobelia	"Veronica"
20753	Senecio	"Tauhque", Páramo Rico, 5 Km. S. of California, Cordillera Oriental, Sept. 15, 1944.
20754	Geranium	"Campanillita"
20755	Hydrophyllaceae?	"Calendula"
20756	Lobeliaceae	
20757	Ranunculus	
20758	Senecio formosus	
20759	Compositae	
20760	Ranunculus	
20761	Eriocaulon	
20762	Callitriche	
20763	Halenia	
20764	Veronica	Vetas, Cordillera Oriental, Santander, Sept. 15, 1944
20765	Labiatae	
20766	Compositae	Páramo de Saturbán, Cordillera Oriental, Santander, Sept. 16, 1944
20767	Espeletia	
20768	Lamourouxia	
20769	Azorella new?	
20770	Halenia	
20771	Compositae	
20772	fern	
20773	Sisyrinchium bogotense	
20774	Lycopodium	
20775	Gentianaceae	
20776	Lupinus	
20777	Luzula racemosa	
20778	Castilleja	
20779	Espeletia	

FOREIGN ECONOMIC ADMINISTRATION

20780 Fuchsia	15 Km. S. of Chitagá, Norte de Santander, Cordillera Oriental, 10,200 ft.	Sept. 24, 1944
20781 Ericaceae		
20782 Orchidaceae		
20783 Lobeliaceae		
20784 Hypericum	20 Km. S. of 11,100 ft.	
20785 Melastomaceae		
20786 Eryngium humile var.		
20787 Halenia	5 Km. N. of Alto de Almorzadero, Chitagá Valley, Cordillera Oriental, Santander, 12,250 ft.	Sept. 24, 1944
20788 Compositae		
20789 Halenia		
20790 Hypochoeris setosa		
20791 Valeriana vetasana or longifolia		
20792 Arenaria muscifoimis		
20793 Ranunculus		
2 0794 Cardamine	1 Km. N. of Alto de Almorzadero, Chitagá Valley, Cordillera Oriental, Santander,	Sept. 24, 1944
20795 Hieracium	12,500 ft.	
20796 Lycopodium Selago ?		
20797 Cerastium arvense ?		
20798 Senecio almorzaderonis or niveo-aureus		
20799 Compositae	Alto de Almorzadero, Chitagá Valley, Cordillera OrientalSantander, 12,700 ft.	Sept. 24, 1944.
20800 Lysipoma acaulis		
20801 Orthocarpus		
20802 Epilobium		
20803 Cuphea	3 Km. S. of Tunja, Cordillera Oriental, Boyacá, 12,250 ft.	Sept. 24, 1944
20804 Compositae		
20805 Paepalanthus petraeus		
20806 Fuchsia	Salto de Tequendama, Rio Bogotá, Cordillera Oriental, Cundinamarca,	Oct. 1, 1944
20807 Centropogon		
20808 Begonia		
20809 Tovaria		
20810 Solanaceae		
20811 Bocconia		
20812 Jacaranda	5 Km. S. W. of Arbelaez, Rio Cuja, Cundinamarca,	Oct. 6, 1944
20813 Macrocnemum	1 Km. N. W. of Coello, Rio Coello, Cordillera Central, Tolima,	Oct. 7, 1944
20814 Bocconia	1 Km. E. of Cajamarca, Cordillera Central, Tolima,	Oct. 7, 1944.
20815 Bocconia	2 Km. E. of Depresión, Cordillera Central, Caldas,	Oct. 7, 1944.
20816 Bocconia	"Pajarito" 4 Km. E. of Manizales, Rio Chinchiná, Cordillera Central, Caldas,	Oct. 10, 1944

20817 Psychotria — El Bosque, Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 17, 1944
20818 Iochroma aff. gesnerioides — Quebrada de Peñas Blancas, N. of Km. 29, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.
20819 Chusquea Lehmanni ?
20820 Orchidaceae
20821 Vallea stipularis var.
20822 Begonia — Quebrada La Paila, 2 Km. N. of Km. 28, Manizales-Mariquita Highway, Cordillera Central, Caldas Oct. 18, 1944.
20823 Solanum — "Yerba mora"
20824 Lupinus — Rio Chinchiná, Km. 12, Highway E. of Manizales, Cordillera Central, Caldas, Oct. 19, 1944.
20825 Centropogon aff. foetidus — Quebrada Termales, 5 Km. N. by road of Termales, Rio Chinchiná, Cordillera Central, Caldas, Oct. 19, 1944.
20826 Saurauia brachybotrys var. macrantha — Rio Tapias, S. W. of Aranzazu, Caldas Oct. 22, 1944.
20827 Carica Goudotiana — "papayuelo" Union, Rio Chamberi, Cordillera Central, Caldas, Oct. 22, 1944.
20828 Macrocnemum
20829 Bocconia — Quebrada Honda, 5 Km. S. W. of Aranzazu, Cordillera Central, Caldas, Oct. 22, 1944.
2 0830 Bocconia — "Curador" Rio Tapias, 5 Km. N. of Neira, Caldas, Oct. 22
20831 Rubiaceae vine — Filo de La Selva, S. of Rio San Eugenio, Cordillera Central, Caldas Oct. 26, 1944.
20832 Rubiaceae
20833 Cleome, — Chaquiro Mine, Rio San Eugenio, Cordillera Central Oct. 26, 1944
20834 Rubiaceae — Chaquiro-Páramo de Santa Rosa trail, S. of Chaquiro Falls, Rio San Eugenio, Cordillera Central, Oct. 28, 1944
20835 Acanthaceae of Gesneriaceae
20836 tree alt. lvs. berries
20837 Fuchsia Hartwegi
20838 Physalis ?
20839 Solanaceae
20840 Acanthaceae
20841 Drimys — "Canelo"
20842 Bomarea
20843 Rubiaceae
20844 Hymenophyllum
20845 Vallea stipularis var. pubescens — 3 K. S. W. of Sibaté, Rio Muña, Cundinamarca Nov. 5, 1944.
20846 Carica female — "Papaya de monte" San Ramón-San Eugenio ridge, 15 Km. E. of Santa Rosa de Cabal, Cordiller Central, Caldas Nov. 13, 1944.
20847 Carica male — "
20848 Berberis — "Uvita" Campoalegre-San Ramón Ridge, Termales-Santa Isabal trail, E. of Santa Rosa de Cabal, Cordillera Central, Caldas Nov. 15, 1944
20849 Orchidaceae

49

20850 Fuchsia "Pepino de monte" Campoalegre-San Ramon Ridge, Termales-Santa Isabel trail, E. of Santa Rosa de Cabal, Cordillera Central Nov. 15, 1944.
20851 Umbelliferae "Anisillo"
20852 Viburnum
20853 Nertera Depresion, Cordillera Central Nov. 18, 1944.
20854 Liliaceae Mt. N. of Quebrada Venus, E. of Armenia, Cordillera Central Nov. 21, 1944.
20855 Orchidaceae
2 0856 Lycopodium "Melena verde"
20857 Cinchona pubescens 5 Km. N. of Circasia, Caldas Nov. 22, 1944.
20858 Centropogon Filo Cachirí, W. of Quebrada Termales, Rio Chinchiná, Cordillera Central Nov. 24, 1944.
20859 Centropogon
20860 Orchidaceae
20861 Orchidaceae
20862 Orchidaceae
20863 Orchidaceae
20864 Gunnera
20865 Gunnera
20866 Gynandropsis Quebrada Romeral, Rio Chinchiná, Cordillera Central Nov. 26, 1944.
20867 Palicourea
20868 Centropogon
20869 Pinguicula
20870 Cinchona pubescens "Oreja de mula" (Bark sample) N. side fo Quebrada Termales, 4 Km. S. of junction with Rio Chinchiná, Cordillera Central, Caldas, Nov. 27, 1944.
20871 Macrocnemum 8 Km. up Rio Apía on first uplands, Caldas, Nov. 29.
20872 Cinchona pubescens (Bark sample) "Cascarilla" Quebrada Farallona, Rio Apía, Cordillera Occidental, Caldas Nov. 29, 1944
20873 Cinchona pubescens "Cascarilla" (Bark sample) Cuchilla San Rafael, 3 Km. W. of Santuario, Cordillera Occidental, Caldas Dec. 1, 1944.
20874 Gesneriaceae Cerro Churumbelo, 2nd. ridge N. of Quebrada Peñasblancas, S. W. of Santuario, Cerro Tztamá, Cordillera Occidental, Caldas Dec. 3, 1944.
20875 Orchidaceae
20876 Orchidaceae
20877 Gesneriaceae
20878 Orchidaceae
20879 Orhidaceae
20880 Ericaceae "Uvitas"
20881 Orchidaceae
20882 Orchidaceae
20883 Gesneriaceae "Mancha de sangre"
20884 Orchidaceae
20885 Begonia near head of Rio Mapa, Cerro Tatamá, Cordillera Occidental Dec. 4, 1944.
20886 Orchidaceae
20887 Gynandropsis
20888 Acanthaceae
20889 Carica "Papayo" Rio Lejos, E. of Pijao, Cordiller Central Dec. 10, 1944.

20890 Vallea stipularis "Raque" Rio Lejos, camino a Páramo de Chilí, Cordillera Central, Caldas Dec. 10, 1944
20891 Lycopodium "Melena"
20892 Vallea stipularis "Manzano" Rio Azul, Páramo de Chilí, Cordillera Central Dec. 11, 1944
20893 Vallea stipularis "Manzano"
20894 Orchidaceae La Vega, Rio Azul, Páramo de Chilí, Cordillera Central, Caldas Dec. 11, 1944
20895 Compositae " " Dec. 12, 1944.
20896 Compositae "Cenizo"
20897 Pedicularis Rio Azul, Páramo de Chilí, Cordillera Central Caldas Dec. 12, 1944.
20898 Espeletia Páramo de Chilí, Quebrada El Oso, Cordillera Central, Tolima Dec. 12, 1944
20899 Compositae
20900 Centropogon

PLANT COLLECTIONS MADE BY EARL L. CORE IN THE REPUBLIC OF COLOMBIA
DURING THE PROGRESS OF EXPLORATIONS FOR CINCHONA

1. Ericaceae — In pass, Cordillera Oriental, along highway from Bogota to Villavicencio, elev. about 10,000 ft., dept. Cundinamarca, Nov. 7, 1943
2. Rosaceae
3. Espeletia
4. Hedyotis
5. Pipalanthus
6. Lupinus
7. Eupatorium
8. Oxalis
9. Valerianella
10. Gramineae
11. Rubiaceae
12. Cyperaceae
13. Luzula
14. Rubiaceae
15. Rubiaceae
16. Pipalanthus
17. Orchidaceae
18. Ericaceae
19. Hypericum
20. Melastomaceae
21. Lycopodium
22. bamboo
23. Gramineae
24. Gramineae
25. Senecio, probably abietinum
26. Halenia
27. Gramineae
28. Sisyrinchium
29. Gentiana
30. Geranium
31. Blechnum arboreum
32. Castilleja
33. Befaria
34. Gaultheria
35. Ericaceae
36. Madia
37. Gnaphalium
38. Compositae
39. Ericaeaea
40. Gnaphalium
41. Compositae
42. Bartsia
43. Compositae, Aster or near relative
44. --- Silvia, along Rio Piendamo, elev. about 2500 m. dept. Cauca, Nov. 16, 1943
45. Rubus
46. Viola
47. Cinchona pitayensis

FOREIGN ECONOMIC ADMINISTRATION

48. Cinchona pitayensis. In plantation of Miguel Cáisambas, Pitayo, elev. 2800 m., November 17, 1943
49. Tree , summit of pass on trail between Silvia and Pitayo, elev. 3000 m., November 17, 1943
50. Hypericum
51. Tree
52. Shrub
53. Shrub
54. Bomarea
55. Gnaphalium
56. Orchidaceae
57. Shrub
58. Melastomaceae
59. Semi-shrubby
60. Palicourea, west slope, on Hacienda Agoyan, about 12 km. east of Silvia, near paramo de las Letras, elev. 2980 m., in forest. Nov. 18, 1943
61. Cinchona pitayensis
62. Rubiaceae
63. Solanum, same locality as above, but pasture land, elev. 2800 m., Nov. 18, 1943
64. Melastomaceae
65. Melastomaceae
66. Tree with red flowers, Hacienda Ambochico, near Silvia, elev. about 2700 m., Nov. 18, 1943
67. Melastomaceae (Blakea?). In forest along Piendamo-Silvia highway, between Kms. 12 and 13, elev. 2460 m., Nov. 19, 1943
68. Cinchona pubescens
69. Tree
70. Cinchona pubescens. In open field along Piendamo-Silvia highway, between Kms. 15 and 16, elev. 2500 m., Nov. 19, 1943
71. Cinchona pubescens. Along trail, San Miguel to La Vega, 1 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
72. Tree
73. Eleocharis. Along highway at Dolores (Rosas), dept. Cauca, Nov. 24, 1943
74. Rynchospora
75. Cinchona pubescens. Along trail, San Miguel to La Vega, east-facing slope, 5 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
76. Cinchona pubescens. Along trail, San Miguel to La Vega, at summit of mountain, place called Campomento, on land of Gustavo Molano, elev. 2000 m. Nov. 26
77. Herb. Near La Vega, elev. about 7500 ft., Nov. 27, 1943, dept. Cauca
78. Shrub
79. Climber
80. Very common
81. Shrub,"fiambre"
82. Climber
83. On rocks
84. Shrub, "totocal"

FOREIGN ECONOMIC ADMINISTRATION

135. Ladenbergia. Sample of bark secured at Rosal, collected in mts. east of Santiago and Rosal, dept. Cauca, Nov. 30, 1943
136. Cinchona pubescens. Ramada de trompo de puerco, northwest of Chaux, elev. 2200 m., Dec. 8, 1943
137. Orchidaceae. Along trail from San Jose to Micay, elev. 2700 m. Dec. 8, 1943
138. Centropogon? Along trail from San Jose to Micay, elev. 2700 m. Dec. 8
139. Cinchona pubescens. Loma del Trueno, northwest of Chaux, elev. 2200 m. Dec. 8
140. Cinchona pitayensis. Near trail between San Jose and Micay, elev. 2500 m. Dec 8
141. Cinchona pubescens. Northwest of Chaux 1 km., elev. 2300 m. Dec. 8
142 . Northwest of Chaux 2 km., elev. 2400 m. Dec. 8
143. Orchidaceae
144. Orchidaceae. Along trail between San Jose and Micay, elev. 2700 m., Dec. 8, 1943
145. Cecropia. 2 km. south of Chaux, elev. 2000 m. Dec. 9, 1943
146. Cinchona pubescens. Near Gamboa. elev. 2040 m.
147. Cinchona pubescens. Along camino between Gamboa and San Jose, elev. 2040 m.
148. Cinchona pubescens. At San Jose, elev. 2420 m. Dec. 9, 1943
149. Cinchona pubescens. About 3 kms. south of Chaux, elev. 2220 m. Dec. 9
150. Cinchona pubescens. Quebradilla de Seguenguito, near Chaux, elev. 2120 m.
151. Cinchona pubescens. Quebrada de Seguenguito, near Chaux, elev. 2080 m
152. Cinchona pubescens. 4 kms. south of Chaux, elev. 2180 m.
153. Cinchona pubescens. Quebrada de Ortega, Dec. 9, elev. 2250 m.
154. Cinchona pubescens. Elev. 2300 m.
155. Cinchona pubescens. Elev. 2300 m.
156. Cinchona pubescens. Elev. 2300 m.
157. Cinchona pubescens. Elev. 2300 m.
158. Guanabana. 4 km. south of Chaux, elev. 2180 m. Dec. 9, 1943
159. "Bejuco arrayan". San Jose
160. Orchidaceae. 5 km south of Chaux, elev. 2200 m.
161. Cinchona pubescens. Near Gamboa, elev. 1960 m. Dec. 9, 1943
162. Cinchona pubescens. Finca La Julia, near Tacueyo, dept. Cauca, elev. 1850 m. Dec. 14
163. Cinchona pubescens. Elev. 2000 m.
164. Cinchona pubescens. Elev. 2050 m.
165. Cinchona pubescens. lev. 2080 m.
166. Cinchona pubescens. Elev. 1900 m.
167. Cinchona pitayensis. Sample of bark from stock of Carlos Xxxxx Prieto, stored at Tacueyo.

168. Cinchona pubescens. Sample of bark from Calera, near Tacueyo, collected for Geirardo Prieto
169. Lantana camara. Fields at El Palo, dept. Cauca, December 15, 1943
170. Psidium
171. Eragrostis
172. Crotalaria
173. Paspalum
174. Scleria setacea
175. Canavalia
176. Herb. Along highway between Tunja and Santander, dept. Cauca, Dec. 29, 1943
177. Rosaceae. Rio Ovejas
178. Ladenbergia magnifolia. Rio Ovejas
179. Ladenbergia magnifolia. Rio Ovejas

FOREIGN ECONOMIC ADMINISTRATION

180. Cinchona pubescens. At Pulecio, left side of Quebrada Chaguasguas, elev. 1900 m., Jan. 4, 1944, near Corinto, dept. Cauca
181. Cinchona pubescens. Elev. 2000 m.
182. Cinchona pubescens.
183. Cinchona pubescens.
184. Ladenbergia magnifolia. Elev. 1500 m., along Quebrada Chaguaguas
185. Cinchona pubescens. On ridge between Quebrada Chaguaguas and Q. Carrizal, "montana de la laguna", east of Corinto, elev. 2050 m., Jan. 5, 1944
186. Cinchona pubescens.
187. Cinchona pubescens.
188. Orchidaceae. On ridge between Quebrada Carrizal and Rio Paila, "en el camino salida el paramo", elev. 2000 m., Jan. 6, 1944
189. Moss
190. Drimys
191. Cinchona pubescens. Elev. 2000 m.
192. Cinchona pubescens. Elev. 2000 m.
193. Cinchona pubescens. Elev. 2000 m.
194. Orchidaceae
195. Cyperaceae. "La Playa", near home of Manuel Arango, near headwaters of Rio Guengue, Jan. 8, 1944, elev. 2300 m.
196. Orchidaceae
197. "Cedro"
198. "Incensio"
199. Ladenbergia
200. Cinchona pubescens.
201.
202. Cinchona pubescens. Quebrada de las Viejas., alt. 2050 m., 1½hrs ride from La Playa, Jan. 9, 1944
203. Cinchona pubescens.
204. Cinchona pubescens. Quebrada Carrizal, branch of Rio Guengue, elev. 1750 m.,Jan 9.
205. Rubiaceae
206. Tree. Along camino between Corinto and El Playa, Rio Guengue, 3 hrs. from Corinto, elev. 1500 m., Jan. 9, 1944.
207. Verbena. 5 kms. east of Purace, elev. 2650 m., Jan. 20, 1944.
208. Calceolaria. Elev. 2870 m.
209. Plantago.
210. ~~Plantago.~~
211. elev. 2980 m.
212.
213.
214. Bomarea.
215. Senecio? Culcitium?
216. Castilleja. Wet paramo at 3000 m.
217. Swartia?
218. Lupinus.
219. Compositae.
220. Hypericum.
221. Alchemilla.
222. Senecio glaucifolia?
223. Fern.
224. Ericaceae.
225. Carex.
226. Bromus?
227. Moss
228. Bryophyte.

FOREIGN ECONOMIC ADMINISTRATION

229. Bryophyte. Wet paramo east of Purace, elev. 3000 m., Jan. 20, 1944.
230. Bryophyte.
231. Bryophyte.
232. Bryophyte.
233. Carex.
234. Cyperaceae.
235. Cyperaceae.
236. Bomarea. 5 km. east of Purace, elev. 2650 m., Jan. 20, 1944.
237. Weed in pasture, finca of Henrique Mosquera, near Popayan, elev. about 1700 m.,Jan 2
238. Melastomaceae.
239. Ericaceae.
240. Polypodiaceae.
241. Ericaceae.
242. Gramineae.
243. Leguminosae.
244. Bidens.
245.
246. Scleria hirtella.
247. Begonia. Finca "El Bosque", elev. 2000 m., Cordillera Occidental west of Darien, dept. Valle del Cauca, Feb. 2, 1944.
248. Moss.
249. Hepaticae.
250. Fungus leaf spot.
251. Compositae.
252. Vine.
253. Passiflora.
254.
255.
256. Begonia.
257. Begonia.
258. Vine.
259. Bromeliaceae.
260. Hepaticae.
261. Hepaticae.
262. Piperaceae.
263. Liana.
264. Melastomaceae.
265. liana.
266.
267. Carex.
268. Cinchona pubescens.
269. Macrocnemum. Near Darien, 1500 m.
270. Orchidaceae. Elev. 2000 m.
271. Cinchona pubescens.
272. Sample of bark of Cinchona from deposito of Rafael Maya, Cali, Feb. 5, 1944.
273. Cinchona pubescens, east of Carmen, intendencia of El Choco, on old camino to Bolivar, elev. 2480 m., Feb. 26, 1944.
274. Sisyrinchium. Elev. 2440 m.
275. Cinchona pubescens. Elev. 2440 m.
276. Cinchona pubescens. Elev. 2440 m.
277.
278. Bryophyte. Elev. 2440 m.
279. Bryophyte. Elev. 2440 m.
280. Cinchona pubescens. Elev. 2340 m.

FOREIGN ECONOMIC ADMINISTRATION

281. Viola. East of Carmen, inten. of El Choco, on old camino to Bolivar, Alto de Aguada, elev. 2340 m., Feb. 26, 1944.
282.
283. "Fruta de sopa"
284. Lycopodium.
285. Piper.
286.
287. Epiphylls. Alto de Cortes, west of Carmen, El Choco, elev. 2600 m. Feb. 28, 1944.
288. Orchidaceae.
289. Orchidaceae.
290. Cryptogam.
291. Cryptogam.
292. Cryptogam.
293. Cryptogam.
294. Cryptogam.
295. Cryptogam.
296. Cryptogam.
297. Cryptogam.
298. Cinchona pubescens.
299. Balanophoraceae.
300.
301. Cinchona pubescens.
302. Cinchona pubescens. Elev. 2560 m.
303. Cinchona pubescens. Elev. 2525 m.
304. Cinchona pubescens. Elev. 2520 m.
305. Cinchona pubescens. Elev. 2600 m.
306. Rynchospora.
307. Rynchospora.
308. Rynchospora.
309. Uncinia.
310. Ladenbergia, probably undescribed. Alto de La Clara, northwest of Carmen, El Choco, 2640 m., Feb. 29, 1944.
311. Cinchona pubescens. Elev. 2300 m.
312. Cinchona pubescens. Elev. 2250 m.
313. Cinchona pubescens. Elev. 2230 m.
314. Cinchona pubescens. Elev. 2120 m.
315. Shrub. Parasillo, Alto de la Clara, northwest of Carmen, El Choco, elev. 2680 m., Feb. 29, 1944.
316. Lauraceae.
317. Ladenbergia.
318. Shrub.
319. Stevia ?
320. Burmeistera.
321. Gentianaceae.
322. Psychotria ?
323. Lichen.
324. Lichen.
325. Lichen.
326. Cyperaceae. ?
327. Orchidaceae.
328. Shrub. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
329. Fern.
330. Bryophyte.
331. Bryophyte.

FOREIGN ECONOMIC ADMINISTRATION

330a. Balanophoraceae. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
331a. Balanophoraceae.
332a. Balanophoraceae.
332. Section of tree fern.
333. Lycopodium(or Selaginella). Quebrada La Clara, northwest of Carmen, El Choco, elev. 1800 m., Feb. 29, 1944.
334. Macrocnemum.
335. Cinchona pubescens. Alto de Guaduas, Quebrada de Arboleda, elev. 2000 m., Mar. 1.
336. Cinchona pubescens. Elev. 2050 m.
337. Cinchona pubescens. Elev. 2000 m.
338. Macrocnemam. Quebrada de Arboleda, elv. 1700 m., Mar. 1, 1944, south of Carmen, El Choco.
339. Palicourea. Elev. 1700 m.
340. Bromeliaceae. Alto de Guaduas, elev. 2000 m.
341. Rondeletia.
342. Orchidaceae.
343. Columnea ?
344. Nertera granatensis. Quebrada de Arboleda, elev. 1800 m.
345. Bryophyte. Alto de Guaduas, elev. 2000 m.
346. Bryophyte.
347. Weed.
346a. Araceae.
347a. Meriana.
348. Piperaceae. Alto near Quebrada de Girardot, branch of Rio Atrato, elev. 1500-2000 m, March 2, 1944.
349.
350.
351.
352. Orchidaceae.
353. Solanaceae.
354. Orchidaceae.
355. Bromeliaceae.
356. Palicourea.
357.
358. Burmeistera. Rio Dauro, tributary of Rio Habita, east of Carmen, El Choco, elev. 2200 m., Mar. 3, 1944.
359. Cinchona pubescens. Quebrada La Ciria, branch of Rio Pabon, at Las Cruces, dept. Antioquia, elev. 2250 m., Mar. 7, 1944.
360. Cinchona pubescens. Elev. 2250 m.
361. Gesneriaceae.
362. Ericaceae.
363. Cinchona pubescens. Elev. 2350 m.
364. Cinchona pubescens. Elev. 2400 m.
365. Loasaceae. Elev. 2250 m.
366. Cyperaceae. Elev. 2250 m.
367. Eugenia Jambos. Las Cruces. Elev. 2200 m.
368. Clusia. Along Rio Pabon, near mouth of Quebrada Aguaschiquillas, elev. 2150 m., Mar. 8, 1944.
369. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco, 12 km. south of Urrao, Antioquia, elev. 2040 m.
370. Cinchona pubescens.
371. Rondeletia.

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372. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco, 12 km. south of Urrao, Antioquia, elev. 2040 m., Mar. 9.
373.
374. (Mar 10
375. Shrub. Rio Chuscal, north of Urrao, near home of Miguel Angel Navarro, elev. 2500 m
375a. Cladonia. In trail between home of Miguel Angel N. and paramo, elev. 3000 m. Mar 10
375b.
376. Herb. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. Mar. 10.
377.
378.
379.
380. Espeletia.
381.
382.
383.
384.
385.
386.
387.
388.
389.
390.
391.
392. Espeletia.
393. Carex. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. , Mar. 11.
394. Carex.
395. Espeletia.
396. Espeletia.
397. Juncus.
398.
399.
400. Gramineae.
401. Polypodiaceae.
402. Geranium.
403.
404.
405. Ranunculus.
406.
407.
408. Gramineae.
409.
410.
411.
412. Carex.
413.
414.
415. Lusula. In trail ~~xixxx~~ between house of Miguel Angel N. and Paramo of Frontino, elev. 3200 m., Mar. 11
416. Orchidaceae. Elev. 3200 m.
417. Orchidaceae.
418. Laderbergia.
419. Cinchona pubescens, elev. 2700 m.
420.
421. Phaseolus.

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422. Cinchona pubescens. Along Rio Urrao about 15 km. northeast of Urrao, elev. 2200 m., Mar. 11.
422a. Shrub in garden, in Urrao-Caicedo camino, March 13.
423. Weinmannia. Quebrada de las Juntas, Urrao-Caicedo camino, elev. 2250 m, Mar. 13.
424. Palicourea.
425. Cinchona pubescens.
426. Western slope of Alto de Urrao, in Urrao-Caicedo camino, elev. 2400 m.
427. Orchidaceae. Edge of camino, western slope of Alto de Urrao, elev. 2580 m.
428. Cinchona pubescens. Elev. 2480 m.
429. Drimys. Elev. 2620 m.
430. Climber. Elev. 2620 m.
431. Shrub. Elev. 2700 m.
432. Ladenbergia. Elev. 2765 m.
433. Ladenbergia. Elev. 2800 m.
434. Cinchona pubescens. Elev. 2820 m.
435. Eastern slope of Alto de Urrao, Urrao-Caicedo camino, elev. 2600 m., Mar. 13.
436. Cinchona pubescens. Near head of Quebrada Noque, in Urrao-Caicedo camino, elev. 2240 m., March 13, 1944.
437. Cinchona pubescens. Alto de Malabrigo, in Caicedo-Anocosca camino, elev. 2340 m., March 14, 1944.
438. Carex. Canon de La Cortada, Caicedo-Anocosca camino, elev. 2200 m.
439. Cinchona pubescens. Alto de Naranjo between Canon de La Cortada and Quebrada Anocosca, Caicedo-Anocosca camino, elev. 2280 m., Mar. 14.
440. Cinchona pubescens. Along Caicedo-Anocosca camino as it descends into Quebrada Anocosca, elev. 2150 m., Mar. 14.
441. Compositae. Elev. 2100 m.
442. Solanum. Quebrada Anocosca above pueblo of Anocosca, elev. 2200 m.
443. Boraginaceae.
444. Quebrada Anocosca, along Anocosca-Abriaqui camino, elev. 2300 m., Mar. 15.
445. Meriania nobilis.
446. Slopes of Morro Pelado, elev. about 2400 m.
447. Myrica.
448.
449. Tree. Elev. 2700 m.
450. Loranthus. Elev. 2800 m.
451. Polypodiaceae.
452. Orchidaceae. Elev. 3190 m.
453. Orchidaceae.
454. Espeletia. Dry paramo at summit of Morro Pelado, elev. 3330 m.
455. Compositae.
456. Fuchsia.
457. Shrub.
458. Shrub.
459. Shrub.
460. Geranium.
461. Shrub.
462. Shrub.
463. Rosaceae.
464. Damp shady place near summit of Morro Pelado, elev. 3300 m., Mar. 15.
465. Dry ridge top along Anocosca-Abriaqui camino, elev. 2900 m.
466. Cinchona pubescens. Along Anocosca-Abriaqui camino near point where camino reaches Rio Herradura, elev. 2380 m.

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467. Cinchona pubescens. Along Rio Herradura 3 mi. north of Abriaqui, elev. 1850 m., Mar. 16, 1944.
468. Palicourea.
469. Cinchona pubescens. Along Rio Herradura 6 mi. north of Abriaqui, elev. 1860 m., Mar. 16, 1944.
470. Cinchona pubescens. Filon Trespeidras, just north of Herradura, Antioquia, elev. 1720 m., Mar. 16, 1944.
471.
472. Shrub. Along Abriaqui-Frontino camino, 3 mi. southeast of Frontino, elev. 1780 m., Mar. 16, 1944.
473. Clusia. Rio Nore, 5 km. from Frontino, Mar. 19, 1944.
474. Cinchona pubescens. Cordillera de Boqueron, along Medellin-Antioquia highway, between Kms. 32 and 33, elev. 2100 m., Mar. 18.
475. Cinchona pubescens. Along Medellin-Antioquia highway, between Kms. 22 and 23, elev. 2320 m., Mar. 18.
476. Tree. Quebrada de Musingita, elev. 1580 m., Mar 27.
477. Gramineae. Elev. 1600 m.
478. Cinchona pubescens. Alto de Musingita, 1780 m., Mar. 27.
479. Tree. Alto de Musingita, elev. 1850 m., Mar. 27.
480.
481. Tree. Alto de Musingita, between Frontino and Quebrada Musingita, 1850 m., Mar. 27.
482. Asclepiadaceae.
483. Eleocharis. "El Bordo", near Frontino, elev. 1500 m.
484. Cyperus.
485. Eleocharis.
486. Cinchona cordifolia. Rio Musinga, elev. 1600 m., Mar. 28.
487. Solanaceae.
488. Equisetum giganteum.
489. Cinchona cordifolia. Elev. 1680 m.
490. Cinchona cordifolia. Elev. 1700 m.
491. Herb. Alto de Portachuelo, head of Rio Musinga, elev. 2100 m., Mar. 28, 1944.
492.
493. Compositae.
494. Palicourea.
495. Cinchona cordifolia. Elev. 1640 m.
496. In camino between Dabeiba and Llano Grande, about 5 km. south of Llano Grande, elev. 1400 m., Mar. 29, 1944.
497. Compositae. On mountain side above Llano Grande, elev. about 2000 m., Mar. 31.
498. Ladenbergia. Elev. 1900 m.
499.
500. Clusia.
501.
502.
503. Bromeliaceae.
504.
505. Cephaelis.
506.
507.
508.
509. Ladenbergia. Elev. 2100 m.
511.
512. Orchidaceae.
513. Phytolacca. Edge of thicket near Llano Grande, elev. about 1600 m., Mar. 31.
514.

FOREIGN ECONOMIC ADMINISTRATION

515. Along camino within 1 km. south of Llano Grande, elev. m., Mar. 31, 1944. dept. Antioquia.
516.
517. Smilax.
518. Cleome.
519.
520.
521. Ladenbergia.
522. Eleaegia.
523. Cinchona pubescens.
524. Moneima ?
525, Cinchona pubescens. Llano Grande, along trail to Quebrada Chimiado, elev. 1500 m. April 1, 1944. dept. Antioquia.
526. Cinchona pubescens.
527. Camino from Llano Grande to Quebrada Chimiado, elev. 1400 m. Apr. 1.
528. Cinchona pubescens. Elev. 1390 m.
529. Palicourea. Elev. 1300 m.
530. Andropogon. Elev. 1000 m.
531.
532. Tree. Elev. 900 m.
533. "Cafe macho". Along Rio Sucio near Dabeiba, elev. 500 m.
534. Macrocnemum. Below Buenavista, Quebrada Tocumal, north of Urama (San Jose), elev. 1600 m., Apr. 4
535. Shrub. South of Rio del Paramo, elev. 900 m.
536. Cinchona pubescens. Bewteen Buenavista and Alto El Chaquiro, elev. 2100 m., Apr. 5.
537. Ladenbergia. Elev. 2200 m.
538. Cinchona pubescens. Elev. 2250 m.
539. Cinchona pubescens. Elev. 2500 m.
540. In "paramillo", Alto El Chaquiro, camino between Urama and Antesales, elev. 3120 m.
541. Orchidaceae.
542.
543.
544. Espeletia.
545.
546.
547.
548.
549. In forest between Buenavista and Alto El Chaquiro, elev. 2100-2500 m.
550.
551.
552.
553. Cinchona pubescens. Near Buenavista, 1690 m.
554. Cinchona pubescsns. Along camino between Urama and Uramita, elev. 1950 m.p dept. Antioquia. April 6, 1944.
555. Elev. 2000 m.
556. Cinchona pubescsns. Elev. 2100 m.
557. Elev. 2000 m.
558. Elev. 1900 m.
559. Elev. 1720 m.
560. Elev. 1720 m.
561. Cinchona pubescens. Elev. 1720 m.
562. Palicourea.

FOREIGN ECONOMIC ADMINISTRATION

563. Tree. Alto Cadillales, above Quebrada Verruga, elev. 1500 m. Apr. 7. dept. Antioquia.
564. Cinchona pubescens. Alto Cadillales, above Quebrada Verruga, elev. 1850 m., dept. Antioquia. April 8, 1944.
565. Cinchona pubescens. Elev. 1700 m.
566. Elev. 1600 m.
567. Compositae. Elev. 1600 m.
568. Compositae.
569. Along Rio Uramita about 5 mi. above Uramita, dept. Antioquia. Apr. 8.
570. Gesneriaceae. Vicinity of Los Andes, finca of Ismael Lopez, along Rio Blanco, southeast of Guasca, dept. of Cundinamarca, elev. 9300 ft. Apr. 21.
571. Boraginaceae.
572. Rubiaceae.
573. Viola.
574. Polypodiaceae.
575 .Pplygonum.
576. Alchemilla.
577. Compositae.
578.
579. Tropaeolum.
580. Scirpus.
581. Solanum.
582. Rubiaceae.
583. Solanum.
584. Gunnera. Apr. 19.
585. Cruciferae. Apr. 19
586. Apr. 19
587. Apr. 19
588. Uncinia. Apr. 19
589. Gesneriaceae. Apr. 19.
590. Palicourea. Apr. 19.
591. Apr. 19
592. Rubiaceae. Apr. 19.
593. Cinchona officinalis. Apr. 19.
594. Cinchona officinalis. Apr. 19.
595. Cinchona officinalis. Apr. 19.
596. Calceolaria. Apr. 19.
597. Drimys Apr. 19.
598. Carex. Apr. 19.
599. Carex. Apr. 19.
600. Carex. Apr. 19.
601. Cinchona officinalis. Apr. 20.
602. Rubiaceae. Apr. 20.
603. Rubiaceae. Apr. 18.
604. Orchidaceae. Apr. 18.
605. Cinchona officinalis. Apr. 18.
606. Apr. 18.
607. Rubiaceae. Apr. 18.
608. Juncus bufonius ? Apr. 18.
609. Cinchona officinalis. Apr. 18.
610. Cinchona officinalis. Apr. 18.
611. Cinchona pubescens. In Yarumal-Santa Rosa highway about 30 km. north of Santa Rosa, dept. Antioquia, elev. 2560 m., May 2.

FOREIGN ECONOMIC ADMINISTRATION

612. Highway between Yarumal and Valdivia, elev. 2100 m., dept. of Antioquia, May 3, 1944.
613.
614. Same, Alto San Fermin, elev. 2000 m.
614a. Bark sample.
615. Herb.
616. Herb.
617. Shrub.
618. Herb.
619. Cinchona officinalis. Alto Catatumbo, elev. 2300 m.
620. Shrub.
621. Gesneriaceae. Near finca Rio Negro, near headwaters of Quebrada Rosario, elev. 1600 m., dept. Antioquia, May 4, 1944.
622. Rubiaceae.
623. Ladenbergia. Alto El Oso, elev. 2320 m.
624. Compositae.
625.
626. Compositae.
627. Gramineae.
628.
629. Cinchona officinalis. Morro Azul, near Yarumal, along old Yarumal-Valdivia camino, elev. 2500 m., May 4.
630. Cinchona officinalis.
631. Camino between Quebrada Rosario and "Ventanas", elev. 1500-1900 m., May 5.
632.
633. Palicourea.
634.
635. Carretera near Las Ventenas, elev. 1950 m., May 5.
636.
637.
638.
638a. Bark sample.
639. Scleria hirsuta. Along trail near Campomento, elev. 1500 m., May 6.
640. Bidens.
641. Cinchona pubescens. Along trail between Campomento and Anori, on ridge between Quebrada Negra and Rio Nechi, elev. 1350 m., May 7.
642. Scleria secans. Elev. 1300 m.
643. Along trail at Plan de la Rosa, elev. 1480 m.
644. Orchidaceae. Elev. 1400 m.
645.
646. Scleria bracteata. Elev. 1400 m.
647. Compositae. Quebrada Soledad, along Campomento-Anori camino, elev. 980 m.
648. Drosera. Along Campomento-Anori camino near Anori, elev. 1600 m.
649. Elaeagia. In vicinity of Rio Anori, east of the village of Anori, elev. 1550 m., dept. Antioquia, May 8, 1944.
650.
651. Passiflora.
652. Palicourea.
653. Cinchona pubescens. 1660 m.
654. Elev. 1550 m.
655. Cinchona pubescens. Elev. 1640 m.
656. Rubiaceae. Elev. 1550 m.
657. Rubiaceae.
658. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.

FOREIGN ECONOMIC ADMINISTRATION

659. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.
660.
661.
662. Cinchona henleana. In camino between Madreseca and Providencia, along Rio Anori, dept. Antioquia, May 10, 1944, 600-700 m. elev.
663.
664. Cinchona henleana.
665. Lobeliaceae.
666. Remijia.
667. Remijia. Finca of Gabriel Rendon, Quebrada Tirana, near Rio Anori, 9 km. north of Madreseca, elev. 620 m. May 10.
668. Palicourea.
669. Remijia. 610 m. elev.
670. Remijia. Elev. 640 m.
671. Polypodiaceae. Elev. 640 m.
672. Gesneriaceae. Elev. 610 m.
673. Achras sapota. Elev. 640 m.
674. Elev. 600 m.
675. Bryophyte. Elev. 640 m.
676. Along Anori-Cruces camino, 3 km. north of Anori, elev. 1500 m., May 11.
677. Along Rio Anori about 12 km. north of Anori, elev. 1000 m.
678. Isertia ? Along Rio Anori between Cruces and Madreseca, elev. 1000 m.
679. Along camino between Cruces and Madreseca, elev. 800 m.
680. Isertia? Along camino at Madreseca, elev. 720 m.
681. Along Cruces-Madreseca camino, elev. 800 m.
682. Isertia? Along Anori-Cruces camino about 10 km north of Anori. Elev. 1000 m.
683. Bark sample.
684. Bark sample.
685. Camino between Anori and Robles, dept. Antioquia, May 12, elev. 1600 m.
686. Heliconia. Elev. 1560 m.
687. Elev. 1680 m.
688. Rubus. Elev. 1780 m.
689. Cuphea. Elev. 1780 m.
690. Sporobolus. Elev. 1780 m.
691.
692. Melastomaceae. Camino between Robles and Guadalupe, elev. 1700 m., May 13
693.
694. Ericaceae.
695.
696. Elev. 1800 m.
697. Cinchona pubescens, elev. 1810 m.
698. Cinchona pubescens. Elev. 1670 m.
699. Elev. 1735.
700. Elev. 1750 m.
701. Ladenbergia. Elev. 1760 m.
702. Rynchospora. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., May 15.
703. Cinchona pubescens. Elev. 2120 m.
704. Rubiaceae.
705. Rubiaceae.
706.
707. Carex.
708. Xyris.

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709. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., dept. Antioquia, Lycopodium, May 15.
710. Orchidaceae. Quebrada at headwaters of Rio Tenche, May 15.
711. Juncus.
712. Cyperus.
713. Gramineae.
714. Cyperaceae.
715. Juncus.
716. Cinchona pubescens. Elev. 2080 m.
717. Moneima.
718. Compositae.
719. Orchidaceae.
720. Tree along Carolina-Tenche camino near El Radio, elev. 1880 m.
721. Cinchona pubescens. Between La Ceja and La Union, dept. Antioquia, elev. 2200 m., May 22, 1944.
722. Along carretera about 1 mi. southeast of La Union.
723. Headwaters of Rio Buey, along carretera.
724. Cinchona officinalis. Along La Union-Sonson carretera, near Rio Aures, at km. 95, elev. 2300 m. May 22.
725. Hepaticae. "Paramo d e Sonson", along or near the carretera between Sonson and Narino, elev. 9000-9600 ft., May 23.
726. Compositae.
727. Hepaticae.
728. Alchemilla.
729.
730.
731. Rubus.
732. Ladenbergia.
733. Orchidaceae.
734. Labiatae.—?
735.
736.
737.
738. Lycopodium.
739.
740.
741.
742. Carex.
743. Nertera.
744. Alchemilla.
745. Saurais. Along highway near Narino, elev. 5800 ft., May 24.
746. Hyptis.
747. Fimbristylis.
748. Cyperaceae.
749. Cyperus.
750. Cinchona pubescens. Alonf highway near headwaters of Rio Negrito, elev. 7600 ft., dept. Antioquia, May 24, 1944.
751. Setaria. Slopes of Alto La Paloma, east of Sonson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25.
752.
753.
754.
755. Weinmannia.
756.
757.

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758. Rosaceae. Slopes of Alto La Paloma, west of Sanson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25, 1944.
759. Fuirena.
760.
761. Rynchospora.
762.
763.
764. Cinchona pubescens. Elev. 8500 ft.
765. Befaria
766. Cinchona pubescens.
767.
768.
769. Ladenbergia. Alto Chambuscado, northwest of Sonson, elev. 9200 ft., May 26.
770. Elev. 8500 ft.
771. Melastomaceae. Alto Capiro, northwest of Sonson, elev. 9200 ft.
772. Cinchona pubescens. Alto Capiro, headwaters of Quebrada Naranjal, elev. 9100 ft.
773. Rubus. Elev. 9100 ft.
774.
775. Viola. Alto Chambuscado, northwest of Sonson, elev. 9700 ft.
776. Viburnum.
777. Cinchona pubescens. Finca Capiro, elev. 9100 ft.
778. Sisyrinchium.
779. Tritoma. Along roadside, Alto Roblelita, southwest of Sonson, elev. 8800 ft. May 27
780. Plantago. Elev. 9700 ft
781. Rubiaceae. Elev. 9800 ft.
782. Phyllanthus. Elev. 9800 ft.
783. Ericaceae. elev. 9800 ft.
784. Rubiaceae. Elev. 9200 ft.
785. Melastomaceae.
786. Cinchona pubescens. Elev. 9200 ft.
787. Cinchona officinalis. Along camino between Sonson and Argelia about 5 km. east of Paramo, elev. 2180 m., May 29. Dept. Antioquia.
788. Cinchona pubescens. Along camino between Sonson and Argelia about 6 km. east of Paramo, elev. 2040 m.
789. Cinchona pubescens. Along camino between Sonson and Argelia at point called Vibora, elev. 1810 m.
790. Galium.
791. Ladenbergia.
792. Palicourea. Along camino between Sonson and Argelia about 3 mi. west of Argelia, elev. 1630 m., dept. Antioquia.
793. Scleria.
794. Gramineae. In camino 1-2 km. west of Argelia, elev. 1580 m., May 30.
795.
796. Boraginaceae.
797. Borreria laevis.
798. Lycopodium.
799. Eleocharis.
800. Panicum.
801. Gramineae.
802. Compositae.
803. Gesneriaceae.
804. Palicourea. In camino between Argelia and Alto del Tigre, elev. 1600 m., May 31.
805. Gramineae.
806. Polypodiaceae.
807.
808. Scleria.
809. Cinchona pubescens. Elev. 1500 m.

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810. Hydrangea. In camino between Argelia and Alto del Tigre, elev. 1620 m., dept. Antioquia, May 31, 1944.
811. Tropaeolum.
812.
813. Becquerelia.
814. Scleria secans. Along camino between Alto del Tigre and El Socorro, elev. 1710-900 m., June 1, 1944.
815.
816.
817.
818.
819.
820. Palicourea.
821. Selaginella. In camino between El Socorro and Mulato, elev. 900-400 m., June 2.
822. Scleria melaleuca.
823. Selaginella.
824.
825.
826.
827.
828.
829. Remijia. Camino between Mulato and Pecuaria, elev. 340 m., June 3.
830.
831.
832. Remijia.
833.
834.
835. Palicourea. In camino between Pecuaria and San Miguel, elev. 300-200 m.
836. Scleria melaleuca.
837. Eclipta alba. San Miguel, along shores of Rio La Miel. June 4.
838. Tree. Between Pato and San Juan, dept. Antioquia, elev. 350 m., June 20, 1944.
839. Remijia.
840. Cyperus.
841. Scleria.
842. Scleria.
843. Fuirena ? Cruces de Caceres, elev. 570 m., June 22.
844. Fimbristylis ?
845. Cyperaceae.
846. Cyperus.
847. Cyperus.
848. Melastomaceae.
849. Cyperus.
850. Cyperus.
851.
852. Scleria melaleuca.
853.
854.
855. Palicourea.
856. Palicourea.
857. Remijia. East of Cruces, elev. 580 m.
858. Loranthaceae.
859. Remijia.
860. Remijia.

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861. Remijia. West of Cruces de Caceres, elev. 580 m., June 22, 1944.
862.
863. "Goma de perilla".
864. Remijia.
865.
866. Shrub. Between Cruces de Caceres and Quebrada Segovia, June 23.
867. Cyperus. In camino near Dos Bocas, dept. Antioquia, June 24.
868. Scleria. Along highway between Zaragoza and "Clarito"
869. Leguminosae.
870. Scleria melaleuca.
871. Malvaceae.
872. Scleria.
873. Herb. Chapa, near headwaters of Rio Quilcace, elev. 2300 m., dept. Cauca, July 10.
874.
875. Gramineae.
876.
877. Labiatae.
878.
879. Gramineae. Between Paispamba and Chapa, near headwaters of Rio Quilcace.
880
881. Quercus humboldtiana.
882. Carex. Along camino between Chapa and Alto Batanes, elev. 2500 m., July 11.
883. Cinchona pitayensis. Elev. 2640 m.
884. Compositae. Elev. 2850 m.
885. Cinchona pitayensis. Elev. 2640 m.
886. Calceolaria. Elev. 2850 m.
887. Elev. 2850 m.
888.
889. Uncinia.
890. Calceolaria.
891. Labiatae. Alto de Batanes, elev. 2900 m.
892. Polypodiaceae.
893. Carex. Between Chapa and Paispamba, elev. 2200 m., July 12.
894. Gramineae.
895. Befaria.
896. Cuphea.
897. Rubiaceae. Camino between Chapa and Rio Blanco at Quebrada Flautos, elev. 2720 m., dept. Cauca, July 13, 1944.
898. Calceolaria.
899. Rubus. In thicket at timberline, elev. 2800 m.
900. Orchidaceae. Quebrada Flautos, elev. 2720 m.
901. Galium.
902. Melastomaceae. Quebrada Flautos, elev. 2800 m.
903. Paramo de Sotara, elev. 3220 m.
904.
905. Geranium.
906.
907.
908. Luzula. Camino near paramo, elev. 3000 m.
909. Rynchospora. Paramo de Sotara, elev. 3220 m.
910. Above Rio Blanco, elev. 2600 m.
911. Eupatorium. Above Rio Blanco, elev. 2500 m.
912. Bryophyte. Paramo de Sotara. 3220 m.

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913. Galium. Near Rioblanco, elev. 2600 m., July 14, 1944, dept. Cauca.
914. Alnus.
915. Cinchona pitayensis. Finca Concordia, elev. 2750 m.
916. Elev. 2680 m.
917.
918. Elev. 2700 m.
919. Cinchona pitayensis. Finca Concordia, 2750 m.
920. "Ortiga". Near Rioblanco, on camino to Quebrada Osoguaico, July 15, 1944.
921. Carex.
922.
923. Melastomaceae. Elev. 2400 m.
924. Palicourea. Elev. 2800 m. Alto La Honda.
925. Boraginaceae. Alto La Honda, elev. 2800 m.
926.
926a.
927. Cinchona pitayensis.
928. Sambucus nigra. Finca Volador. Elev. 2480 m.
929. "Churillo".
930. Vicia. Camino between Rioblanco and Guachicono, July 17.
931.
932. Melastomaceae.
933. Epilobium. Camino between Guachicono and Quebrada Vellones, July 18, elev. 2500 m.
934.
935.
936.
937. Cuphea. Elev. 2900 m.
938. Orchidaceae.
939. Melastomaceae. Cordillera Vellones, elev. 3100 m.
940. Quebrada Vellones, elev. 2800 m.
941.
942.
943.
944.
945.
946.
947.
948. Cruciferae.
949.
950. Cinchona pitayensis. Head of Rio Putis, elev. 2820 m.
951. Bomarea. Elev. 2800 m.
952. Cyperaceae. Cordillera Vellones, elev. 3100 m.
953. Rio Putis, elev. 2900 m.
954.
955. Camino between Guachicono and Cordillera Vellones, elev. 2800 m.
956. Orchidaceae. headwaters of Rio Putis, elev. 2900 m.
957.
958.
959. Rio Putis headwaters, elev. 2800 m.
960.
961. Elev. 2900 m.
962.
963. Viola. Head of Rio Putis, elev. 2900 m.
964. Labiatae. Along camino near Guachicono, elev. 2700 m.

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965. Paramo de las Barbillas, south of Guachicono, dept. Cauca, elev. 3100 m., July 19, 1944.
966.
967.
968.
969.
970. Lupinus.
971. Eynchospora.
972.
973. Lomaroa.
974.
975.
976. Espeletia.
97 .
978. Castilleja.
979.
980.
981. Carex.
982.
983.
984. Iridaceae.
985. Juncus.
986. Ranunculus.
987. Hypericum.
988.
989. Headwaters of Rio Caqueta, elv. 2900 m., July 19.
990.
991. Between Guachicono and Paramo de las Barbillas, elev. 2900 m., July 19.
992. Datura.
993. Compositae. Wet sabana of frailejones in Valle de las Papas near Valencia, elev. 2700 m., July 20, 1944.
994. Plantago.
995. Compositae.
996.
997.
998. Rubus.
999. Xyris.
1000. Juncus.
1001. Cladonia.
1002. Lobelia.
1003. Cyperaceae.
1004. Juncus.
1005. Lycopodium.
1006. Musci. Growing on thatched roof of house in Valle de las Papas, elv. 2700 m.
1007. Lobelia. Valle de las Papas, dept. Cauca, elev. 2700 m., July 21, 1944.
1008.
1009.
1010. Solanum.
1011. Solanum.
1012. Rubus.
1013. Shrub. Along camino between Valencia and San Sebastian, east slope of mountain, elev. 2700-3000 m., July 21.

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1014. Boraginaceae. Along camino between Valencia and San Sebastian, east slope of
B mountain, elev. 2700-3000 m., July 21, 1944.
1015. Galinsoga ?
1016.
1017. Gramineae.
1018. Same locality, but west side of mountain, elev. 2500-3000 m.
1019.
1020.
1021. Gramineae. On dry roadbanks near San Sebastian, elev. 2200 m., July 21.
1022. Musci.
1023. Ladenbergia. Along Rio Grande, camino between San Sebastian and San Andres,
elev. 2500 m., July 23, 1944.
1024. Cinchona officinalis. Along Rio Grande near San Andres, elev. 2200 m., July 24.
1025. Ladenbergia (Cinchona henleana). Along trail, San Andres to Santa Rosa, near
Rio Grande, elev. 2150 m.
1026. Cinchona pubescens. Between Quebrada Curuyaco and Santa Rosa, along Rio
Caqueta, elev. 1840-1700 m., July 24.
1027. Psychotria ?
1028.
1029. Canicula.
1030. Galiua.
1031. Caryophyllaceae.
1032.
1033.
1034. Rynchospora.
1035. Rynchospora.
1036. Orchidaceae.
1037.
1038.
1039.
1040.
1041. Cinchona officinalis. La Vieja, overlooking Santa Rosa, July 25, 1944.
1042. Cinchona officinalis (tuna).
1043. Cinchona officinalis ("roja"). Elev. 2100 m.
1044. Cinchona officinalis ("roja"). Elev. 1900 m.
1045. Cinchona officinalis ("roja"). Elev. 1900 m.
1046. "Quassia".
1047. Cinchona officinalis. Bark sample.
1048. Cinchona officinalis. Bark sample.
1049. Cinchona pubescens. Along Rio Caqueta, camino between Carmelo and Rio Curuyaco,
elev. 1800 m., July 26, 1944.
1050. Cinchona pubescens. Along Rio Caqueta, camino between Santa Rosa and Carmelo,
elev. 1720 m.
1051. "Barbasco". Santa Rosa, elev. 1700 m.
1052. Near Carmelo, elev. 1800 m.
1053. Cissus. Roadside near Santa Rosa, elev. 1800 m.
1054. Cinchona pubescens. Camino between Rio Curuyaco and Rio Grande, elev. 2200 m.
1055. Solanum. Along or near Rio Grande, camino between San Andres and Alto Todos
Santos, elev. 2400-2700 m., July 27, 1944.
1056. Rynchospora.
1057. Carex.
1058.
1059. Eleocharis.
1060.

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1061. Between Alto Todos Santos and San Sebastian, elev. 2300 m., July 27.

1062.
1063. Lichen.
1064. Lecopodium. Along or near Rio Grande, camino between San Andres and Alto Todos Santos, elev. 2400-2700 m., July 27.
1065. San Sebastian, dept. Cauca, July 28, 1944.
1066. Eresine celosia.
1067.
1068. Phytolacca.
1069. Rosaceae.
1070. Camino between San Sebastian and Bolivar, near Rio Negro, elev. 1600 m., July 29, 1944.
1071. Macrocnemum. Elev.2000 m.
1072. Tree. Along Rio San Jorge, near San Sebastian, elev. 1500 m.
1073. Camino near Rio Negro, elev. 1500 m.
1074. Malpighiaceae ? Along camino, north slope of Cerro Gordo, elev. 1700 m.
1075. Cosmibueba. Quebrada Ortega, west of Cajibio, elev. 1520 m., August 24, 1944.
1076. Cosmibuena.
1077. Camino near Ortega, elev. 1300 m.
1078.
1079.
1080.
1081. La Laguna, elev. 1800 m.
1082. Soleria bracteata. Rio Cauca at Dinde, elev. 1260 m.
1083. Finca La Cumbre, Cordillera Occidental, head of Quebrada La Florida, headwaters of Rio Dinde, elev. 2700 m., August 25.
1084. Polygonaceae.
1085. Rubus.
1086. Palicourea.
1086a.
1087. Viburnum.
1088. Solanaceae.
1089. North slopes of La Cumbre, Pico de Aguila, Rio Agau Clara drainage, elev. 2700 m., August 26.
1090.
1090a. Gnaphalium. (south slopes)
1090b. Moss. (south slopes)
1091. Cinchona pitayensis.
1092.
1093.
1094. "Pino colombiano".
1095. Caryophyllaceae.
1096. Bryophyte.
1097.
1098. Ladenbergia.
1099. Cinchona pitayensis.
1100. Balanophoraceae.
1101. Quebrada Los Andes, La Cumbre, near finca of Zoilo Campo, west of Pico de Aguila, elev. 2750 m., August 27.
1102. Cinchona pitayensis. Elev. 2750 m.
1103.
1104. Lycopodium.
1105.
1106.
1107.

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1108. Between La Cumbre and Quebrada La Isla, headwaters of Rio Dinde, elev., 2700 m., August 28, 1944.
1109. Elev. 2600 m.
1110.
1111. Solanum.
1112. Elev. 2500 m.
1113. Viola.
1114. Viola. Elev. 2400 m.
1115.
1116. "Molasses grass".
1117.
1118. Carex. Elev. 2000 m. At Quebrada Obscuridad.
1119. Elev. 2300 m.
1120. Elev. 2000 m.
1121. Rynchospora. Elev. 2000 m. Quebrada Obscuridad.
1122. Euphorbiaceae. Elev. 2200 m.
1123. Elev. 2000 m. Between Quebradas Obscuridad and La Isla.
1124.
1125.
1126.
1127. Cinchona pubescens.
1128. Ladenbergia. Quebrada Ortega, elev. 1700 m., August 29.
1129. Elev. 1650 m.
1130. Elev. 1600 m.
1131.
1132. Graminese. Elev. 1500 m.
1133. Lycopodium. Rim of canyon of Rio Cauca east of Dinde, elev. 1550 m.
1134. Ladenbergia. Between Quebrada Ortega and La Laguna, elev. 1780 m.
1135. Quebrada Ortega, elev. 1500 m.
1136.
1137.
1138.
1139.
1140. Quercus humboldtiana. Quebrada La Isla, elev. 2000 m.
1141. Between Quebrada La Isla and Quebrada Ortega, elev. 1700 m.
1142. Quebrada Ortega, elev. 1500 m.
1143. Ladenbergia. Quebrada Ortega, elev. 1700 m.
1144.
1145.
1146.
1147. "Lava platos". Patia Valley near Patia, September 7, 1944. Dept. Cauca. Elev. 640 m.
1148. Elev. 600 m.
1149. Canavalia. Rio Capitanes, elev. 1000 m.
1150. Phaseolus. Rio Capitanes. Elev. 800 m.
1151. "Buenas tardes". Compositae. Trail near Patia, elev. 625 m.
1152. Scleria bracteata. Bewteen Olaya and San Alfonso, Rio Capitanes, elev. 1000 m.
1153. Cassia. Rio Patia. Elev. 600 m.
1154. Ladenbergia. Between Olaya and San Alfonso, Rio Capitanes, elev. 1250 m.
1155. Lobeliaceae. San Alfonso, elev. 1800-2000 m.
1156. Piperaceae.
1157. Compositae.
1158. Monoima.
1159. Rubiaceae.
1160. Piperaceae.
1161. Lobeliaceae.
1162. Psychotria ?
1163. Lobeliaceae.

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1164. "Cardo santo". San Alfonso, elev. 1800-2000 m. Sept. 8, 1944. Dept. Cauca.
1165. Compositae.
1166. Asclepiadaceae.
1167. Uncinia.
1168. Gnaphalium.
1169. Crotalaria.
1170. Melastomaceae.
1171. Eupatorium.
1172. Rubiaceae.
1173. Rubiaceae.
1174. Psychotria ?
1175. Cerastium ?
1176. Bocconia frutescens.
1177. Palmae.
1178.
1179. Psychotria ?
1180.
1181.
1182. Psychotria.
1183. Apocynaceae.
1184. Solanum galeatum. ("Tomate de arbol").
1185.
1186. Rubiaceae.
1187. Hedyosmum granizo.
1188. Solanum. "Guinda".
1189. Anona.
1190. Eugenia.
1191. "Aguacatillo".
1192. "Totocal".
1193. Cerro San Pedro and its slopes, elev. 2880 m., Sept. 10.
1194. Isertia. Elev. 2750 m.
1195. Rubiaceae. Elev. 2520 m.
1196. Cinchona pitayensis. North of Ce ro San Pedro, elev. 2750 m.
1197. Lobeliaceae. Elev. 2540 m. South slopes.
1198.
1199. Valerianaceae. Near camp, elev. 2500 m.
1200. South slopes.
1201. North slopes. elev. 2750 m.
1202. Cinchona pitayensis. South slopes, elev. 2540 m.
1203. Berberis. 2600 m.
1204. Palicourea. Northwest slopes, elev. 2730 m.
1205. "Pasto Micay". North slopes, elev. 2800 m.
1206.
1207. Elev. 2700 m.
1208.
1209. Elev. 2800 m.
1210. Elev. 2750 m.
1211. Elev. 2700 m.
1212.
1213. Cinchona pitayensis.
1214. Cinchona pitayensis.
1215. Rubiaceae.
1216. Cinchona pitayensis. North slopes, elev. 2700 m.

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1217. Moss. Cerro San Pedro and its slopes, west of El Bordo, dept. Cauca, elev. 2660 m., September 10, 1944.
1218. Weinmannia. Elev. 2880 m.
1219. Drimys granatensis. Elev. 2880 m.
1220. Rynchospora.
1221a. "Yolombo".
1221. Camp Cerro San Pedro, elev. 2520 m., September 11.
1222. Between Cerro San Pedro and San Alfonso, on top of cordillera, elev. 2500-2700 m.
1223. Lobeliaceae. Sept. 11.
1224. Cinchona. Elev. 2480 m.
1225. Elev. 2500-2700 m.
1226. "Yolombo".
1227. Hypericum laricifolium.
1228. Freziera chrysophylla. "Motilon".
1229. Freziera chrysophylla.
1230. "Guaraguin".
1231. Gramineae.
1232. Lobeliaceae.
1233. "Amarillo pena".
1234.
1235. Rubiaceae. Along Quebrada Puente de Tierra above Argelia, dept. Cauca, elev. 1800 m., September 13, 1944.
1236. Solanum.
1237. Elev. 1300 m.
1238. Condaminea corymbosa. Elev. 1600 m.
1239.
1240. Solanaceae.
1241. "Jigua".
1242. "Jigua".
1243. "Guayacan".
1244. Anona. Elev. 2000 m.
1245. Headwaters of Rio Turbio, elev. 2200 m., Sept. 13.
1246. Near Puente de Tierra, elev. 2200 m. Sept. 13.
1247. Solanaceae. Quebrada Puente de Tierra, elev. 2100 m., Sept. 13.
1248. Elev. 2200 m. Near Puente de Tierra.
1249.
1250. Quebrada Puente de Tierra, 2100 m., Sept. 13.
1251. At Argelia, elev. 1220 m., Sept. 14.
1252. Rubiaceae. Along Rio San Juan above Argelia, elev. 1500 m.
1253. Headwaters of Rio San Juan, slopes of Cerro Bello, elev. 1700 m.
1254. Along Rio San Juan above Argelia, elev. 1400 m.
1255. Cosmibuena. Quebrada de la Laguna, elev. 1700 m.
1256.
1257. Rubiaceae. Quebrada de la Laguna, elev. 2000 m., Sept. 15.
1258. Quebrada de la Laguna, elev. 1800 m.
1259.
1260. Quebrada de la Laguna, elev. 1650 m.
1261. Elev. 1800 m.
1262. Ylaeagia. Elev. 1650 m.
1263.
1264. "Hoja santa". Quebrada de la Laguna, elev. 2000 m.
1265. Cinchona pijayensis. We t slopes of Cerro Bello, headwaters of Rio Guaitara, elev. 2700 m., Sept. 16, 1944.

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1266. Summit of peak near Cerro Bello, elev. 3020 m., Sept. 16.
1267.
1268.
1269. Compositae.
1270. Hypericum.
1271. Headwaters of Quebrada de la Laguna, elev. 2500 m.
1272. Gramineae. Slopes of Cerro Bello, elev. 2800 m.
1273. Weinmannia. Summit of peak near Cerro Bello, elev. 3020 m.
1274. Rosaceae.
1275. Compositae.
1276. Bomarea. Near summit of Cerro Bello, elev. 29 00 m.
1277. Gramineae.
1278. Gramineae.
1279. Gramineae.
1280. Rubiaceae. Elev. 2500 m.
1281. Rubiaceae. Elev. 3020 m.
1282. Camp Cerro Bell, elev. 2120 m.
1283. Cinchona pubescens. Headwaters of Rio Guaitara near La Depresion, elev. 2400 m., dept. Cauca., September 17, 1944.
1284. Melastomaceae.
1285.
1286. Bromeliaceae. Elev. 2500 m.
1287. Headwaters of Quebrada de la Laguna, elev. 2120 m.
1288. Elev. 2200 m.
1289. "Cedro". Elev. 2360 m.
1290. Palicourea. Head of Rio Guaitara, elev. 2250 m., Sept. 18.
1291. Araceae. Elev. 2000 m.
1292.
1293. Rubiaceae. Elev. 2250 m.
1294. Araliaceae. Elev. 2000 m.
1295. Araliaceae. Elev. 1620 m.
1296. Rubiaceae. Elev. 2000 m.
1297. Rubiaceae. Elev. 2310 m.
1298. Cinchona pubescens. Elev. 2310 m.
1299. Heliconia. Elev. 1620 m.
1300. Rubiaceae.
1301. Sept. 19.
1302. Ladenbergia. Elev. 1560 m., along Rio Guaitara.
1303. Macrocnemum.
1304. Joosia.
1305. Macrocnemum. Along Rio Guaitara, elev. 1550 m.
1306.
1307. Condaminea.
1308. Elev. 1560.
1309. Elev. 1500 m.
1310. Rubiaceae. Elev. 1560 m.
1311. "Jigua". Elev. 1500 m.
1312. Orchidaceae.
1313. Hepaticae.
1314. Joosia. Elev. 1550 m.
1315. Elev. 1350 m.
1316. Asclepiadaceae. Elev. 1400 m.
1317. Polypodiaceae. Elev. 1550 m.
1318. "Moriehillo". Elev. 1500 m.

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1319. Melastomaceae. Along footpath between Rio San Juan (at Quebrada Las Naranjas) and Quebrada Agua Clara, dept. Cauca, elev. 1500 m., Sept. 21.
1320a.
1320b.
1321. Monotropa. Elev. 1600 m.
1322.
1323. Solanum. Along Rio Pinche, elev. 1480 m., September 23, 1944.
1324. Headwaters of Rio Pinche, elev. 1870 m.
1325. Headwteras of Rio Timbiqui, at bas eof Cerro Pinche, elev. 1890 m., Sept. 24.
1326. La Depresion at base of Cerro Pinche, elev. 1800 m.
1327. Rubiaceae.
1328. Rubiaceae.
1329. Elev. 2000 m., September 25, 1944.
1330.
1331.
1332.
1333.
1334.
1335.
1336.
1337.
1338.
1339.
1340.
1341.
1342. Loranthaceae.
1342. "Chusques."
1344. Orchidaceae.
1345. Fern.
1346.
1347.
1348.
1349. Orchidaceae.
1350. (No collection).
1351. Orchidaceae.
1352. Orchidaceae.
1353. Towards south end of La Depresion between Cerro Pinche and Cerro Plateado complex, elev. 1980-2440 m., Sept. 26.
1354.
1355.
1356.
1357.
1358.
1359.
1360. Cinchona pubescens. Elev. 1960 m.
1360a. Cinchona pubescens.
1361. Polytrichum.
1362. Moss.
1363. Moss.
1364. Bomarea,
1365. Fern.
1366. Rubiaceae. Elev. 1960 m.

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1367. Along Rio Pinche near headwaters, elev. 1960 m., Sept. 27, 1944.
1368. Bromeliaceae. Elev. 1740 m.
1369. Polypodium. Elev. 1330 m.
1370. Cladium ? Elev. 1330 m.
1371. Mapania ? Elev. 1300 m.
1372. Gesneriaceae. Elev. 1300 m.
1373.
1374.
1375.
1376. Along Rio Pinche near camp Chontaduro, elev. 1030 m., Sept. 28.
1377. Along Quebrada Aguaclara near its junction with Rio Plateado, elev. 1100 m.
1378.
1379. Lycopodium. Collected on slopes of Cerro Plateado, elev. 2600-3000 m., by Carlos Hutter and Rafael Hurtado, Sept. 20-29.
1380. Iridaceae.
1381. Cinchona pubescens.
1382. Ericaceae.
1383.
1384.
1385. Gesneriaceae.
1386. Cladonia.
1387.
1388. Rubiaceae.
1388a. Rubiaceae.
1389. Orchidaceae.
1390. Orchidaceae.
1391. Loranthaceae.
1392. Balanophoraceae. Collected by Hutter and Hurtado, Rio Guaitara, elev. 1600 m.
1392a. Cinchona pitayensis. Cerro Plateado, Hutter and Hurtado.
1392b. Rubiaceae. Hutter and Hurtado.
1393. Cinchona pitayensis.
1393a. Cinchona pitayensis.
1394. Araceae.
1395. Rynchospora.
1396.
1397. "Jigua".
1398.
1399. Vitis.
1400.
1401. Rio Guaitara, elev. 1350 m. Hutter and Hurtado.
1402. Rubiaceae. Along Rio San Juan near Argelia, collected by J.S.Granger, elev. 1200, Sept. 29, 1944.
1403. (From this point forward collections are by Earl L. Core) Near Los Naranjos, elev. 1700 m., Sept. 28.
1404.
1405. "Canime". Near Los Naranjos, elev. 1500 m., Sept. 29.
1406. Rubiaceae.
1407. Scleria melaleuca. Along Rio San Juan below Argelia, elev. 900 m.
1408. "Jigua". Along Rio San Juan below Argelia, elev. 1200 m., Sept. 30.
1409. Stachytarpheta.
1410. Macrocnemum.
1411. Cosmibuena.
1412.
1413. Cyperus.
1414.
1415. Asclepias curassavica.
1416. Condaminea corymbosa.

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1417. Cinchona pubescens. Near Leiva.
1418. Cinchona.
1419. "Barbasco". Bejuco.
1420. Bomarea. Quebrada Puente de Tierra, elev. 1800 m., October 1, 1944.
1421. Peperomia, Elev. 1900 m.
1422. Carex. Elev. 1700 m.
1423. 1423a. Cosmibuena.
1424. Scloria. Rio Capitanes near San Alfonso, elev. 1420 m., Oct. 3.
1425. Along camino near San Alfonso, dept. Cauca, elev. 1800 m.
1426. Melastomaceae. Quebrada Las Tayas, elev. 1100 m., Oct. 3.
1427. Cinchona pubescens. Quebrada Las Tayas, elev. 1320 m.
1428. Scloria bracteata. Rio Capitanes, elev. 1450 m.
1429. Clitoria. Quebrada Las Tayas, elev. 1000 m.
1430. Guazuma ulmifolia. Rio Patia near El Bordo, elev. 700 m.
1431. Cinchona pitayensis. Bark sample.
1432. Compositae. Moscopan.
1433. Compositae.
1434. Gnaphalium.
1435. Paramo of Purace, elev. 3000 m., Oct. 11, 1944.
1436.
1437. "Romero".
1438.
1439.
1440. "Arnica".
1441. Bomarea.
1442. Bromeliaceae.
1443. Compositae.
1444. Carex.
1445. Carex.
1446. Gramineae.
1447. Cyperaceae.
1448. Compositae.
1449. Compositae.
1450.
1451. Geranium.
1452. Cladonia.
1453.
1454. Carex. Hot sulfur baths.
1455. Ericaceae. Hot sulfur baths.
1456. Collected by Rafael Hurtado in the Moscopan region, dept. Cauca, Oct. 7-11.
1457.
1458. Cinchona pubescens.
1459. Ericaceae.
1460.
1461.
1462. Cinchona officinalis.
1462a.
1463.
1464.
1465. Rubiaceae.
1466. Rubiaceae.
1467. Espeletia. Elev. 2120 m.
1468. Orchidaceae. (End of collection of Rafael Hurtado).

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1469. Rubiaceae. Queremal, Valle col Cauca dept., elev. 1500-1500 m., Oct. 2[illegible], 1944.
1470. Chusquea.
1471. Lobeliaceae.
1472. Orchidaceae.
1473. Shrub.
1474. Zingiberaceae.
1475. Gesneriaceae.
1476. Rubiaceae.
1477. Apocynaceae.
1478. Epiphyte.
1479. Orchidaceae.
1480. Lobeliaceae.
1481. Epiphyte.
1482. Herb.
1483. Mikania ?
1484. Gesneriaceae.
1485. Cucurbitaceae.
1486. Shrub. Dense forest above Finca Tokio, near Queremal, Oct. 29, 1300-1900 m.
1487.
1488.
1489.
1490. Cyclanthaceae.
1491. Cinchona pubescens.
1492. Bromeliaceae.
1493.
1494. Orchidaceae.
1495.
1496.
1497.
1498.
1499.
1500. Begonia.
1501. "Nacedera". Head of Rio San Juan, near Queremal, elev. 1500 m., Oct. 29.
1502. Acalypha.
1503. "Jigua".
3 1504. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, Valle del Cauca dept., November 6, 1944.
3 1505. Orchidaceae.
3 1506. Rubiaceae.
1506.
2 1507. Utricularia.
3 1508.
2 1509. Cyperus.
2 1510.
2 1511. Malenia ?
2 1512. Xyris.
2 1513. Cyperaceae.
4 1514. Gramineae.
4 1515.
3 1516. Solanaceae.
2 1517.
1 1518. Fern.
4 1519.
1520. Scleria melaleuca.

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1521. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, dept. Valle del Cauca, November 6, 1944.
1522.
1523.
1524. Polygala.
1525. Ploygala alcrantha ?
1526.
1527. Malvaceae.
1528.
1529. Solanaceae.
1530. Cyperus.
1531.
1532.
1533.
1534.
1535. Lantana.
1536.
1537. Cyperus.
1538.
1539.
1540.
1541. Trail from Cordoba to Quebrada La Brea, dept. Valle del Cauca, elev. 50-100 m., November 7, 1944.
1542.
1543. Gesneriaceae.
1544. Gesneriaceae.
1545.
1546. Cinchona barbacoensis.
1547.
1548. Cinchona barbacoensis.
1549. Compositae.
1550.
1551. Cyperaceae.
1552.
1553. Gesneriaceae.
1554. Cinchona barbacoensis.
1555. Cinchona barbacoensis.
1556. Cinchona barbacoensis.
1557.
1558.
1559.
2 1560.
1 1561.
1562. "Corazon herida". In flower garden at Cordoba, November 7.
2 1563. Hibiscus.
2 1564. "Flor de diablo".
6 1656. Locality same as 1541.
3 1566. Fern. In flower garden at Cordoba.
3 1567. Along coast of Pacific Ocean at mouth of Buenaventura Bay, Nov. 8.
7 1568. Rhizophora.
6 1569.
2 1570. Apocynaceae.
7 1571.

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1 1572. Along railway at Dagua, Valle del Cauca dept., Nov. 9.
2 1573. Labiatae.
5 1574. Quebrada Santa Barbara near Florida, Valle del Cauca dept., Nov. 15, elev. 1500 m.
3 1575.
3 1576. Pluches.
1577.
4 1578. Elev. 1700 m.
2 1579. Elev. 2200 m.
3 1580. Cavendishia. Elev. 2600 m.
/ 1581. Cladonia. Elev. 2100 m.
2 1582. Bocconia. Elev. 2600 m.
3 1583. Cavendishia. Elev. 2700 m.
4 1584. Bocconia.
7 1585.
2 1586. Ladenbergia. Elev. 2800 m.
2 1587. Compositae. At top of cordillera central, 3600 m., Florida-Herrera camino, just within dept. of Tolima, Nov. 16.
/ 1588. Gentianaceae.
2 1589.
4 1590. Luzula.
3 1591. Carex.
3 1592. Rubiaceae. Rio Hereje, near Auxilio, dept. Tolima, Nov. 17, elev. 2500 m.
/ 1593.
1594. ?
1595. ?
1596. Cinchona pubescens. Rio Saldana, dept. Tolima, elev. 1600-1800 m., Nov. 19.
3 1597. Rubiaceae.
/ 1598. Lobeliaceae.
3 1599.
3 1600. Fern.
2 1601. Lobeliaceae.
4 1602. Gesneriaceae.
3 1603. Rubiaceae.
/ 1604. Lobeliaceae.
2 1605. Lobeliaceae.
/ 1606. Lobeliaceae.
/ 1607. Lobeliaceae.
2 1608. Monelma.
/ 1609. Gesneriaceae.
/ 1610. Lobeliaceae.
/ 1611. Lobeliaceae.
/ 1612. Gymnospermae.
2 1613.
1614. Rubiaceae.
1615.
5 1616. Thalictrum. Rio Hereje, dept. Tolima, near Albania, elv. 2470 m., Nov. 20.
/ 1617. Elev. 2400 m.
1618. Rubiaceae.
2 1619. Elev. 2000 m.
2 1620. Loasaceae.

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2 1621. Paramo between Auxilio and top of cordillera, elev. 11000 ft., dept. Tolima, November 21, 1944.
2 1622.
2 1623.
4 1624. Compositae. Along Rio Hereje above Auxilio, elev. 2800 m.
2 1625. Galium. Along Rio Hereje near Auxilio, elev. 2700 m.
1 1626. Sisyrinchium. Between Auxilio and top of cordillera, in paramo, elev. 11000 ft.
2 1627. Compositae.
2 1628.
1629. ?
1 1630.
2 1631. In paramo, elev. 10,000 ft.
2 1632.
1 1633.
3 1634. Ribes. Along Rio Hereje above Auxilio, elev. 9000 ft.
1 1635. Gesneriaceae.
1 1636. Paramo at head of Quebrada Santa Barbara, above Abelina, in dept. Valle del Cauca, Nov. 21, elev.11000ft.
3 1637. Espeletia. Elev. 11,000 ft.
1 1638. Elev. 10,000 ft.
2 1639.
2 1640. Arnica.
2 1641. Elev. 11,000 ft.
2 1642. Near Abelina, elev. 10,000 ft.
2 1643. In paramo above Abelina, elev. 11,000 ft.
2 1644.
2 1645.
1646.
2 1647. In paramo at head of Rio Hereje, in Tolima, elev. 11,000 ft.
1648. Puya.
4 1649. El Pedregal, near Florida, elev. 1200 m., dept. Valle, Nov. 22.
6 1650. Solanum. Along Quebrada Santa Barbara, east of Florida, elev. 1650 m.
4 1651. Berberis. In paramo near Abelina, elev. 10,000 ft.
2 1652.
1 1653. Luffa. Cali, Dec. 9. This and the following collected by Rafael Hurtado.
1654. Labiatae. Near Barragan, elev. 2825 m.
1655.
1656. Rio Tulua, elev. 1500 m.
1657. Rio Loro, head of Rio Tulua, 2800 m.
1658.
1659. Cinchona pubescens. Rio Loro, head of Rio Tulua, elev. 3000 m.
1660. Rio Tulua, elev. 1500 m.
1661. Asclepiadaceae. Sevilla, elev. 1520 m.
1662. Datura. Sevilla, Rio Bugalagrande, elev. 1520 m.
1 1663. Typha. Rio Loro, elev. 2800 m.
1664. Sevilla, elev. 1520 m.
1665. Rio Bugalagrande, elev. 1550 m.
1666. Sevilla, elev. 1530 m.
1667. Sevilla, elev. 1530 m.

2 1643a

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1668. Labiatae. along Rio Guengue, near Corinto, dept. of Cauca, elev. 1460 m., Dec. 1-7, 1944. This and the following collected by Carlos Hutter.
1669. Labiatae. Elev. 1500 m.
1670. Caryophyllaceae. Elev. 1600 m.
1671. Leguminosae. Elev. 1560 m.
1672. Elev. 1650 m.
1673.
1674.
1675. Nicotiana. Elev. 2100 m.
1676. Elev. 1650 m.
1677. Cinchona pubescens. Elev. 2320 m.
1678. Cinchona pubescens. Elev. 2360 m.

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85. Gramineae. Mountain slopes near La Vega, Cauca, alt. about 7500 ft., Nov. 28,1943
86. Shrub
87. Salvia
88. Quercus Humboldtiana
89. Weed
90. Shrub
91. Scrambler
92. Vine
93. Gramineae
94. "Pispura"
95. Cuphea
96. Fern
97. Polygonaceae
98. Polygala
99. "Clabillo"
100. "Cerote"
101. Polygonum
102. Liliaceae
103. Oxalis
104. Orchidaceae. Summit of mountain on trail between La Vega and Caquiona, elev. 3000 m., Nov. 29, 1943 - dept. Cauca
105. Melastomaceae. Near Caquiona, dept. Cauca, Nov. 29, 1943
106. Clusia.
107. Rubus
108. Alnus ferrugineus
109. Viola
110. Viola
111. Scrambler
112. Rutaceae. "arrayan amargo". Along trail just west of San Sebastian, Nov. 30, 1943
113. Orchidaceae. Along trail between San Sebastian and Rosal, Nov. 30, 1943
114. Dodonaea viscosa. Sapindaceae. "Chamano".
115. "Cajon de chucha". Along ridge between Rio Ramos and Quebrada Meneses, 6 km. east of Rosal, dept. Cauca., Nov. 30, 1943
116.
117. Rubiaceae
118. Compositae
119. Shrub
120. Manihot esculenta. Along trail between Rosal and Bolivar, Dec. 1, 1943
121. Coffee
122. Herb
123. Leguminosae. Calliandra
124. Gramineae. Lasciacis
125.
126. Vine
127. "Totocal"
128.
129. Labiatae
130. Cinchona pubescens, elev. 2000 m.
131. Cinchona pubescens, elev. 2000 m.
132. Cinchona pubescens, elev. 2000 m.
133. Ladenbergia
134. Sample of bark of Cinchona pitayensis from quantity being harvested by Matias Delgado, Quebradilla, Caquiona, Nov. 29, 1943

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135. Ladenbergia. Sample of bark secured at Rosal, collected in mts. east of Santiago and Rosal, dept. Cauca, Nov. 30, 1943
136. Cinchona pubescens. Ramada de trompo de puerco, northwest of Chaux, elev. 2200 m., Dec. 8, 1943
137. Orchidaceae. Along trail from San Jose to Micay, elev. 2700 m. Dec. 8, 1943
138. Centropogon? Along trail from San Jose to Micay, elev. 2700 m. Dec. 8
139. Cinchona pubescens. Loma del Trueno, northwest of Chaux, elev. 2200 m. Dec. 8
140. Cinchona pitayensis. Near trail between San Jose and Micay, elev. 2500 m. Dec 8
141. Cinchona pubescens. Northwest of Chaux 1 km., elev. 2300 m. Dec. 8
142 . Northwest of Chaux 2 km., elev. 2400 m. Dec. 8
143. Orchidaceae
144. Orchidaceae. Along trail between San Jose and Micay, elev. 2700 m., Dec. 8, 1943
145. Cecropia. 2 km. south of Chaux, elev. 2000 m. Dec. 9, 1943
146. Cinchona pubescens. Near Gamboa. elev. 2040 m.
147. Cinchona pubescens. Along camino between Gamboa and San Jose, elev. 2040 m.
148. Cinchona pubescens. At San Jose, elev. 2420 m. Dec. 9, 1943
149. Cinchona pubescens. About 3 kms. south of Chaux, elev. 2220 m. Dec. 9
150. Cinchona pubescens. Quebradilla de Seguenguito, near Chaux, elev. 2120 m.
151. Cinchona pubescens. Quebrada de Seguenguito, near Chaux, elev. 2080 m
152. Cinchona pubescens. 4 kms. south of Chaux, elev. 2180 m.
153. Cinchona pubescens. Quebrada de Ortega, Dec. 9, elev. 2250 m.
154. Cinchona pubescens. Elev. 2300 m.
155. Cinchona pubescens. Elev. 2300 m.
156. Cinchona pubescens. Elev. 2300 m.
157. Cinchona pubescens. Elev. 2300 m.
158. Guanabana. 4 km. south of Chaux, elev. 2180 m. Dec. 9, 1943
159. "Bejuco arrayan". San Jose
160. Orchidaceae. 5 km south of Chaux, elev. 2200 m.
161. Cinchona pubescens. Near Gamboa, elev. 1960 m. Dec. 9, 1943
162. Cinchona pubescens. Finca La Julia, near Tacueyo, dept. Cauca, elev. 1850 m. Dec. 14
163. Cinchona pubescens. Elev. 2000 m.
164. Cinchona pubescens. Elev. 2050 m.
165. Cinchona pubescens. Elev. 2080 m.
166. Cinchona pubescens. Elev. 1900 m.
167. Cinchona pitayensis. Sample of bark from stock of Carlos Prieto, stored at Tacueyo.

168. Cinchona pubescens. Sample of bark from Calera, near Tacueyo, collected for Geirardo Prieto
169. Lantana camara. Fields at El Palo, dept. Cauca, December 15, 1943
170. Psidium
171. Eragrostis
172. Crotalaria
173. Paspalum
174. Scleria setacea
175. Canavalia
176. Herb. Along highway between Tunja and Santander, dept. Cauca, Dec. 29, 1943
177. Rosaceae. Rio Ovejas
178. Ladenbergia magnifolia. Rio Ovejas
179. Ladenbergia magnifolia. Rio Ovejas

FOREIGN ECONOMIC ADMINISTRATION

180. Cinchona pubescens. At Pulecio, left side of Quebrada Chaguasguas, elev. 1900 m., Jan. 4, 1944, near Corinto, dept. Cauca
181. Cinchona pubescens. Elev. 2000 m.
182. Cinchona pubescens.
183. Cinchona pubescens.
184. Ladenbergia magnifolia. Elev. 1500 m., along Quebrada Chaguaguas
185. Cinchona pubescens. On ridge between Quebrada Chaguaguas and Q. Carrizal, "montana de la laguna", east of Corinto, elev. 2050 m., Jan. 5, 1944
186. Cinchona pubescens.
187. Cinchona pubescens.
188. Orchidaceae. On ridge between Quebrada Carrizal and Rio Paila, "en el camino salida el paramo", elev. 2000 m., Jan. 6, 1944
189. Moss
190. Drimys
191. Cinchona pubescens. Elev. 2000 m.
192. Cinchona pubescens. Elev. 2000 m.
193. Cinchona pubescens. Elev. 2000 m.
194. Orchidaceae
195. Cyperaceae. "La Playa", near home of Manuel Arango, near headwaters of Rio Guengue, Jan. 8, 1944, elev. 2300 m.
196. Orchidaceae
197. "Cedro"
198. "Incensio"
199. Ladenbergia
200. Cinchona pubescens.
201.
202. Cinchona pubescens. Quebrada de las Viejas., alt. 2050 m., 1½hrs ride from La Playa, Jan. 9, 1944
203. Cinchona pubescens.
204. Cinchona pubescens. Quebrada Carrizal, branch of Rio Guengue, elev. 1750 m.,Jan 9.
205. Rubiaceae
206. Tree. Along camino between Corinto and El Playa, Rio Guengue, 3 hrs. from Corinto, elev. 1500 m., Jan. 9, 1944.
207. Verbena. 5 kms. east of Purace, elev. 2650 m., Jan. 20, 1944.
208. Calceolaria. Elev. 2870 m.
209. Plantago.
210. Plantago.
211. elev. 2980 m.
212.
213.
214. Bomarea.
215. Senecio? Culcitium?
216. Castilleja. Wet paramo at 3000 m.
217. Swartia?
218. Lupinus.
219. Compositae.
220. Hypericum.
221. Alchemilla.
222. Senecio glaucifolia?
223. Fern.
224. Ericaceae.
225. Carex.
226. Bromus?
227. Moss
228. Bryophyte

FOREIGN ECONOMIC ADMINISTRATION

229. Bryophyte. Wet paramo east of Purace, elev. 3000 m., Jan. 20, 1944.
230. Bryophyte.
231. Bryophyte.
232. Bryophyte.
233. Carex.
234. Cyperaceae.
235. Cyperaceae.
236. Bomarea. 5 km. east of Purace, elev. 2650 m., Jan. 20, 1944.
237. Weed in pasture, finca of Henrique Mosquera, near Popayan, elev. about 1700 m.,Jan 2
238. Melastomaceae.
239. Ericaceae.
240. Polypodiaceae.
241. Ericaceae.
242. Gramineae.
243. Leguminosae.
244. Bidens.
245.
246. Scleria hirtella.
247. Begonia. Finca "El Bosque", elev. 2000 m., Cordillera Occidental west of Darien, dept. Valle del Cauca, Feb. 2, 1944.
248. Moss.
249. Hepaticae.
250. Fungus leaf spot.
251. Compositae.
252. Vine.
253. Passiflora.
254.
255.
256. Begonia.
257. Begonia.
258. Vine.
259. Bromeliaceae.
260. Hepaticae.
261. Hepaticae.
262. Piperaceae.
263. Liana.
264. Melastomaceae.
265. liana.
266.
267. Carex.
268. Cinchona pubescens.
269. Macrocnemum. Near Darien, 1500 m.
270. Orchidaceae. Elev. 2000 m.
271. Cinchona pubescens.
272. Sample of bark of Cinchona from deposito of Rafael Maya, Cali, Feb. 5, 1944.
273. Cinchona pubescens, east of Carmen, intendencia of El Choco, on old camino to Bolivar, elev. 2480 m., Feb. 26, 1944.
274. Sisyrinchium. Elev. 2440 m.
275. Cinchona pubescens. Elev. 2440 m.
276. Cinchona pubescens. Elev. 2440 m.
277.
278. Bryophyte. Elev. 2440 m.
279. Bryophyte. Elev. 2440 m.
280. Cinchona pubescens. Elev. 2340 m.

FOREIGN ECONOMIC ADMINISTRATION

281. Viola. East of Carmen, inten. of El Choco, on old camino to Bolivar, Alto de Aguada, elev. 2340 m., Feb. 26, 1944.
282.
283. "Fruta de sopa"
284. Lycopodium.
285. Piper.
286.
287. Epiphylls. Alto de Cortes, west of Carmen, El Choco, elev. 2600 m. Feb. 28, 1944.
288. Orchidaceae.
289. Orchidaceae.
290. Cryptogam.
291. Cryptogam.
292. Cryptogam.
293. Cryptogam.
294. Cryptogam.
295. Cryptogam.
296. Cryptogam.
297. Cryptogam.
298. Cinchona pubescens.
299. Balanophoraceae.
300.
301. Cinchona pubescens.
302. Cinchona pubescens. Elev. 2560 m.
303. Cinchona pubescens. Elev. 2525 m.
304. Cinchona pubescens. Elev. 2520 m.
305. Cinchona pubescens. Elev. 2600 m.
306. Rynchospora.
307. Rynchospora.
308. Rynchospora.
309. Uncinia.
310. Ladenbergia, probably undescribed. Alto de La Clara, northwest of Carmen, El Choco, 2640 m., Feb. 29, 1944.
311. Cinchona pubescens. Elev. 2300 m.
312. Cinchona pubescens. Elev. 2250 m.
313. Cinchona pubescens. Elev. 2230 m.
314. Cinchona pubescens. Elev. 2120 m.
315. Shrub. Paramillo, Alto de la Clara, northwest of Carmen, El Choco, elev. 2680 m., Feb. 29, 1944.
316. Lauraceae.
317. Ladenbergia.
318. Shrub.
319. Stevia ?
320. Burmeistera.
321. Gentianaceae.
322. Psychotria ?
323. Lichen.
324. Lichen.
325. Lichen.
326. Cyperaceae. ?
327. Orchidaceae.
328. Shrub. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
329. Fern.
330. Bryophyte.
331. Bryophyte.

FOREIGN ECONOMIC ADMINISTRATION

330a. Balanophoraceae. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
331a. Balanophoraceae.
332a. Balanophoraceae.
332. Section of tree fern.
333. Lycopodium(or Selaginella). Quebrada La Clara, northwest of Carmen, El Choco, elev. 1800 m., Feb. 29, 1944.
334. Macrocnemum.
335. Cinchona pubescens. Alto de Guaduas, Quebrada de Arboleda, elev. 2000 m., Mar. 1.
336. Cinchona pubescens. Elev. 2050 m.
337. Cinchona pubescens. Elev. 2000 m.
338. Macrocnemum. Quebrada de Arboleda, elv. 1700 m., Mar. 1, 1944, south of Carmen, El Choco.
339. Palicourea. Elev. 1700 m.
340. Bromeliaceae. Alto de Guaduas, elev. 2000 m.
341. Rondeletia.
342. Orchidaceae.
343. Columnea ?
344. Nertera granatensis. Quebrada de Arboleda, elev. 1800 m.
345. Bryophyte. Alto de Guaduas, elev. 2000 m.
346. Bryophyte.
347. Weed.
346a. Araceae.
347a. Meriana.
348. Piperaceae. Alto near Quebrada de Girardot, branch of Rio Atrato, elev. 1500-2000 m, March 2, 1944.
349.
350.
351.
352. Orchidaceae.
353. Solanaceae.
354. Orchidaceae.
355. Bromeliaceae.
356. Palicourea.
357.
358. Burmeistera. Rio Dauro, tributary of Rio Habita, east of Carmen, El Choco, elev. 2200 m., Mar. 3, 1944.
359. Cinchona pubescens. Quebrada La Ciria, branch of Rio Pabon, at Las Cruces, dept. Antioquia, elev. 2250 m., Mar. 7, 1944.
360. Cinchona pubescens. Elev. 2250 m.
361. Gesneriaceae.
362. Ericaceae.
363. Cinchona pubescens. Elev. 2350 m.
364. Cinchona pubescens. Elev. 2400 m.
365. Loasaceae. Elev. 2250 m.
366. Cyperaceae. Elev. 2250 m.
367. Eugenia Jambos. Las Cruces. Elev. 2200 m.
368. Clusia. Along Rio Pabon, near mouth of Quebrada Aguaschiquillas, elev. 2150 m., Mar. 8, 1944.
369. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco, 12 km. south of Urrao, Antioquia, elev. 2040 m.
370. Cinchona pubescens.
371. Rondeletia.

FOREIGN ECONOMIC ADMINISTRATION

372. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco, 12 km. south of Urrao, Antioquia, elev. 2040 m., Mar. 9.
373.
374. (Mar 10
375. Shrub. Rio Chuscal, north of Urrao, near home of Miguel Angel Navarro, elev. 2500 m
375a. Cladonia. In trail between home of Miguel Angel N. and paramo, elev. 3000 m.Mar 10
375b.
376. Herb. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. Mar. 10.
377.
378.
379.
380. Espeletia.
381.
382.
383.
384.
385.
386.
387.
388.
389.
390.
391.
392. Espeletia.
393. Carex. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. , Mar. 11.
394. Carex.
395. Espeletia.
396. Espeletia.
397. Juncus.
398.
399.
400. Gramineae.
401. Polypodiaceae.
402. Geranium.
403.
404.
405. Ranunculus.
406.
407.
408. Gramineae.
409.
410.
411.
412. Carex.
413.
414.
415. Luzula. In trail ~~xixm~~ between house of Miguel Angel N. and Paramo of Frontino, elev. 3200 m., Mar. 11
416. Orchidaceae. Elev. 3200 m.
417. Orchidaceae.
418. Ladenbergia.
419. Cinchona pubescens, elev. 2700 m.
420.
421. Phaseolus.

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422. Cinchona pubescens. Along Rio Urrao about 15 km. northeast of Urrao, elev. 2200 m., Mar. 11.
423a. Shrub in garden, in Urrao-Caicedo camino, March 13.
423. Weinmannia. Quebrada de las Juntas, Urrao-Caicedo camino, elev. 2250 m, Mar. 13.
424. Palicourea.
425. Cinchona pubescens.
426. Western slope of Alto de Urrao, in Urrao-Caicedo camino, elev. 2400 m.
427. Orchidaceae. Edge of camino, western slope of Alto de Urrao, elev. 2580 m.
428. Cinchona pubescens. Elev. 2480 m.
429. Drimys. Elev. 2620 m.
430. Climber. Elev. 2620 m.
431. Shrub. Elev. 2700 m.
432. Ladenbergia. Elev. 2765 m.
433. Ladenbergia. Elev. 2800 m.
434. Cinchona pubescens. Elev. 2820 m.
435. Eastern slope of Alto de Urrao, Urrao-Caicedo camino, elev. 2600 m., Mar. 13.
436. Cinchona pubescens. Near head of Quebrada Noque, in Urrao-Caicedo camino, elev. 2240 m., March 13, 1944.
437. Cinchona pubescens. Alto de Malabrigo, in Caicedo-Anocosca camino, elev. 2340 m., March 14, 1944.
438. Carex. Canon de La Cortada, Caicedo-Anocosca camino, elev. 2200 m.
439. Cinchona pubescens. Alto de Naranjo between Canon de La Cortada and Quebrada Anocosca, Caicedo-Anocosca camino, elev. 2280 m., Mar. 14.
440. Cinchona pubescens. Along Caicedo-Anocosca camino as it descends into Quebrada Anocosca, elev. 2150 m., Mar. 14.
441. Compositae. Elev. 2100 m.
442. Solanum. Quebrada Anocosca above pueblo of Anocosca, elev. 2200 m.
443. Boraginaceae.
444. Quebrada Anocosca, along Anocosca-Abriaqui camino, elev. 2300 m., Mar. 15.
445. Meriania nobilis.
446. Slopes of Morro Pelado, elev. about 2400 m.
447. Myrica.
448.
449. Tree. Elev. 2700 m.
450. Loranthus. Elev. 2800 m.
451. Polypodiaceae.
452. Orchidaceae. Elev. 3190 m.
453. Orchidaceae.
454. Espeletia. Dry paramo at summit of Morro Pelado, elev. 3330 m.
455. Compositae.
456. Fuchsia.
457. Shrub.
458. Shrub.
459. Shrub.
460. Geranium.
461. Shrub.
462. Shrub.
463. Rosaceae.
464. Damp shady place near summit of Morro Pelado, elev. 3300 m., Mar. 15.
465. Dry ridge top along Anocosca-Abriaqui camino, elev. 2900 m.
466. Cinchona pubescens. Along Anocosca-Abriaqui camino near point where camino reaches Rio Herradura, elev. 2380 m.

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467. Cinchona pubescens. Along Rio Herradura 3 mi. north of Abriaqui, elev. 1850 m., Mar. 16, 1944.
468. Palicourea.
469. Cinchona pubescens. Along Rio Herradura 6 mi. north of Abriaqui, elev. 1860 m., Mar. 16, 1944.
470. Cinchona pubescens. Filon Trespeidras, just north of Herradura, Antioquia, elev. 1720 m., Mar. 16, 1944.
471.
472. Shrub. Along Abriaqui-Frontino camino, 3 mi. southeast of Frontino, elev. 1780 m., Mar. 16, 1944.
473. Clusia. Rio Nore, 5 km. from Frontino, Mar. 19, 1944.
474. Cinchona pubescens. Cordillera de Boqueron, along Medellin-Antioquia highway, between Kms. 32 and 33, elev. 2100 m., Mar. 18.
475. Cinchona pubescens. Along Medellin-Antioquia highway, between Kms. 22 and 23, elev. 2320 m., Mar. 18.
476. Tree. Quebrada de Musingita, elev. 1580 m., Mar 27.
477. Gramineae. Elev. 1600 m.
478. Cinchona pubescens. Alto de Musingita, 1780 m., Mar. 27.
479. Tree. Alto de Musingita, elev. 1850 m., Mar. 27.
480.
481. Tree. Alto de Musingita, between Frontino and Quebrada Musingita, 1850 m., Mar. 27.
482. Asclepiadaceae.
483. Eleocharis. "El Bordo", near Frontino, elev. 1500 m.
484. Cyperus.
485. Eleocharis.
486. Cinchona cordifolia. Rio Musinga, elev. 1600 m., Mar. 28.
487. Solanaceae.
488. Equisetum giganteum.
489. Cinchona cordifolia. Elev. 1680 m.
490. Cinchona cordifolia. Elev. 1700 m.
491. Herb. Alto de Portachuelo, head of Rio Musinga, elev. 2100 m., Mar. 28, 1944.
492.
493. Compositae.
494. Palicourea.
495. Cinchona cordifolia. Elev. 1640 m.
496. In camino between Dabeiba and Llano Grande, about 5 km. south of Llano Grande, elev. 1400 m., Mar. 29, 1944.
497. Compositae. On mountain side above Llano Grande, elev. about 2000 m., Mar. 31.
498. Ladenbergia. Elev. 1900 m.
499.
500. Clusia.
501.
502.
503. Bromeliaceae.
504.
505. Cephaelis.
506.
507.
508.
509. Ladenbergia. Elev. 2100 m.
511.
512. Orchidaceae.
513. Phytolacca. Edge of thicket near Llano Grande, elev. about 1600 m., Mar. 31.
514.

FOREIGN ECONOMIC ADMINISTRATION

515. Along camino within 1 km. south of Llano Grande, elev. m., Mar. 31, 1944. dept. Antioquia.
516.
517. Smilax.
518. Cleome.
519.
520.
521. Ladenbergia.
522. Eleaegia.
523. Cinchona pubescens.
524. Moneima ?
525, Cinchona pubescens. Llano Grande, along trail to Quebrada Chimiado, elev. 1500 m. April 1, 1944. dept. Antioquia.
526. Cinchona pubescems.
527. Camino from Llano Grande to Quebrada Chimiado, elev. 1400 m. Apr. 1.
528. Cinchona pubescens. Elev. 1390 m.
529. Palicourea. Elev. 1300 m.
530. Andropogon. Elev. 1000 m.
531.
532. Tree. Elev. 900 m.
533. "Cafe macho". Along Rio Sucio near Dabeiba, elev. 500 m.
534. Macrocnemum. Below Buenavista, Quebrada Tocumal, north of Urama (San Jose), elev. 1600 m., Apr. 4
535. Shrub. Mouth of Rio del Paramo, elev. 900 m.
536. Cinchona pubescens. Bewteen Buenavista and Alto El Chaquiro, elev. 2100 m., Apr. 5.
537. Ladenbergia. Elev. 2200 m.
538. Cinchona pubescens. Elev. 2250 m.
539. Cinchona pubescens. Elev. 2500 m.
540. In "paramillo", Alto El Chaquiro, camino between Urama and Antesales, elev. 3120 m.
541. Orchidaceae.
542.
543.
544. Espeletia.
545.
546.
547.
548.
549. In forest between Buenavista and Alto El Chaquiro, elev. 2100-2500 m.
550.
551.
552.
553. Cinchona pubescens. Near Buenavista, 1690 m.
554. Cinchona pubescsns. Along camino between Urama and Uramita, elev. 1950 m.p dept. Antioquia. April 6, 1944.
555. Elev. 2000 m.
556. Cinchona pubescsns. Elev. 2100 m.
557. Elev. 2000 m.
558. Elev. 1900 m.
559. Elev. 1720 m.
560. Elev. 1720 m.
561. Cinchona pubescens. Elev. 1720 m.
562. Palicourea.

FOREIGN ECONOMIC ADMINISTRATION

563. Tree. Alto Cadillales, above Quebrada Verruga, elev. 1500 m. Apr. 7.
dept. Antioquia.
564. Cinchona pubescens. Alto Cadillales, above Quebrada Verruga, elev. 1850 m.,
dept. Antioquia. April 8, 1944.
565. Cinchona pubescens. Elev. 1700 m.
566. Elev. 1600 m.
567. Compositae. Elev. 1600 m.
568. Compositae.
569. Along Rio Uramita about 5 mi. above Uramita, dept. Antioquia. Apr. 8.
570. Gesneriaceae. Vicinity of Los Andes, finca of Ismael Lopez, along Rio Blanco,
southeast of Guasca, dept. of Cundinamarca, elev. 9300 ft. Apr. 21.
571. Boraginaceae.
572. Rubiaceae.
573. Viola.
574. Polypodiaceae.
575 .Pplygonum.
576. Alchemilla.
577. Compositae.
578.
579. Tropaeolum.
580. Scirpus.
581. Solanum.
582. Rubiaceae.
583. Solanum.
584. Gunnera. Apr. 19.
585. Cruciferae. Apr. 19
586. Apr. 19
587. Apr. 19
588. Uncinia. Apr. 19
589. Gesneriaceae. Apr. 19.
590. Palicourea. Apr. 19.
591. Apr. 19
592. Rubiaceae. Apr. 19.
593. Cinchona officinalis. Apr. 19.
594. Cinchona officinalis. Apr. 19.
595. Cinchona officinalis. Apr. 19.
596. Calceolaria. Apr. 19.
597. Drimys Apr. 19.
598. Carex. Apr. 19.
599. Carex. Apr. 19.
600. Carex. Apr. 19.
601. Cinchona officinalis. Apr. 20.
602. Rubiaceae. Apr. 20.
603. Rubiaceae. Apr. 18.
604. Orchidaceae. Apr. 18.
605. Cinchona officinalis. Apr. 18.
606. Apr. 18.
607. Rubiaceae. Apr. 18.
608. Juncus bufonius ? Apr. 18.
609. Cinchona officinalis. Apr. 18.
610. Cinchona officinalis. Apr. 18.
611. Cinchona pubescens. In Yarumal-Santa Rosa highway about 30 km. north of
Santa Rosa, dept. Antioquia, elev. 2560 m., May 2.

FOREIGN ECONOMIC ADMINISTRATION

612. Highway between Yarumal and Valdivia, elev. 2100 m., dept. of Antioquia, May 3, 1944.
613.
614. Same, Alto San Fermin, elev. 2000 m.
614a. Bark sample.
615. Herb.
616. Herb.
617. Shrub.
618. Herb.
619. Cinchona officinalis. Alto Catatumbo, elev. 2300 m.
620. Shrub.
621. Gesneriaceae. Near finca Rio Negro, near headwaters of Quebrada Rosario, elev. 1600 m., dept. Antioquia, May 4, 1944.
622. Rubiaceae.
623. Ladenbergia. Alto El Oso, elev. 2320 m.
624. Compositae.
625.
626. Compositae.
627. Gramineae.
628.
629. Cinchona officinalis. Morro Azul, near Yarumal, along old Yarumal-Valdivia camino, elev. 2500 m., May 4.
630. Cinchona officinalis.
631. Camino between Quebrada Rosario and "Ventanas", elev. 1500-1900 m., May 5.
632.
633. Palicourea.
634.
635. Carretera near Las Ventenas, elev. 1950 m., May 5.
636.
637.
638.
638a. Bark sample.
639. Scleria hirsuta. Along trail near Campomento, elev. 1500 m., May 6.
640. Bidens.
641. Cinchona pubescens. Along trail between Campomento and Anori, on ridge between Quebrada Negra and Rio Nechi, elev. 1350 m., May 7.
642. Scleria secans. Elev. 1300 m.
643. Along trail at Plan de la Rosa, elev. 1480 m.
644. Orchidaceae. Elev. 1400 m.
645.
646. Scleria bracteata. Elev. 1400 m.
647. Compositae. Quebrada Soledad, along Campomento-Anori camino, elev. 980 m.
648. Drosera. Along Campomento-Anori camino near Anori, elev. 1600 m.
649. Elaeagia. In vicinity of Rio Anori, east of the village of Anori, elev. 1550 m., dept. Antioquia, May 8, 1944.
650.
651. Passiflora.
652. Palicourea.
653. Cinchona pubescens. 1660 m.
654. Elev. 1550 m.
655. Cinchona pubescens. Elev. 1640 m.
656. Rubiaceae. Elev. 1550 m.
657. Rubiaceae.
658. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.

FOREIGN ECONOMIC ADMINISTRATION

659. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.
660.
661.
662. Cinchona henleana. In camino between Madreseca and Providencia, along Rio Anori, dept. Antioquia, May 10, 1944, 600-700 m. elev.
663.
664. Cinchona henleana.
665. Lobeliaçeae.
666. Remijia.
667. Remijia. Finca of Gabriel Rendon, Quebrada Tirana, near Rio Anori, 9 km. north of Madreseca, elev. 620 m. May 10.
668. Palicourea.
669. Remijia. 610 m. elev.
670. Remijia. Elev. 640 m.
671. Polypodiaceae. Elev. 640 m.
672. Gesneriaceae. Elev. 610 m.
673. Achras sapota. Elev. 640 m.
674. Elev. 600 m.
675. Bryophyte. Elev. 640 m.
676. Along Anori-Cruces camino, 3 km. north of Anori, elev. 1500 m., May 11.
677. Along Rio Anori about 12 km. north of Anori, elev. 1000 m.
678. Isertia ? Along Rio Anori between Cruces and Madreseca, elev. 1000 m.
679. Along camino between Cruces and Madreseca, elev. 800 m.
680. Isertia? Along camino at Madreseca, elev. 720 m.
681. Along Cruces-Madreseca camino, elev. 800 m.
682. Isertia? Along Anori-Cruces camino about 10 km north of Anori. Elev. 1000 m.
683. Bark sample.
684. Bark sample.
685. Camino between Anori and Robles, dept. Antioquia, May 12, elev. 1600 m.
686. Heliconia. Elev. 1560 m.
687. Elev. 1680 m.
688. Rubus. Elev. 1780 m.
689. Cuphea. Elev. 1780 m.
690. Sporobolus. Elev. 1780 m.
691.
692. Melastomaceae. Camino between Robles and Guadalupe, elev. 1700 m., May 13
693.
694. Ericaceae.
695.
696. Elev. 1800 m.
697. Cinchona pubescens, elev. 1810 m.
698. Cinchona pubescens. Elev. 1670 m.
699. Elev. 1735.
700. Elev. 1750 m.
701. Ladenbergia. Elev. 1760 m.
702. Rynchospora. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., May 15.
703. Cinchona pubescens. Elev. 2120 m.
704. Rubiaceae.
705. Rubiaceae.
706.
707. Carex.
708. Xyris.

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709. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., dept. Antioquia, Lycopodium, May 15.
710. Orchidaceae. Quebrada at headwaters of Rio Tenche, May 15.
711. Juncus.
712. Cyperus.
713. Gramineae.
714. Cyperaceae.
715. Juncus.
716. Cinchona pubescens. Elev. 2080 m.
717. Moneima.
718. Compositae.
719. Orchidaceae.
720. Tree along Carolina-Tenche camino near El Radio, elev. 1880 m.
721. Cinchona pubescens. Between La Ceja and La Union, dept. Antioquia, elev. 2200 m., May 22, 1944.
722. Along carretera about 1 mi. southeast of La Union.
723. Headwaters of Rio Buey, along carretera.
724. Cinchona officinalis. Along La Union-Sonson carretera, near Rio Aures, at km. 95, elev. 2300 m. May 22.
725. Hepaticae. "Paramo d e Sonson", along or near the carretera between Sonson and Narino, elev. 9000-9600 ft., May 23.
726. Compositae.
727. Hepaticae.
728. Alchemilla.
729.
730.
731. Rubus.
732. Ladenbergia.
733. Orchidaceae.
734. Labiatae.
735.
736.
737.
738. Lycopodium.
739.
740.
741.
742. Carex.
743. Nertera.
744. Alchemilla.
745. Sauraia. Along highway near Narino, elev. 5800 ft., May 24.
746. Hyptis.
747. Fimbristylis.
748. Cyperaceae.
749. Cyperus.
750. Cinchona pubescens. Alonf highway near headwaters of Rio Negrito, elev. 7600 ft., dept. Antioquia, May 24, 1944.
751. Setaria. Slopes of Alto La Paloma, east of Sonson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25.
752.
753.
754.
755. Weinmannia.
756.
757.

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758. Rosaceae. Slopes of Alto La Paloma, west of Sanson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25, 1944.
759. Fuirena.
760.
761. Rynchospora.
762.
763.
764. Cinchona pubescens. Elev. 8500 ft.
765. Befaria
766. Cinchona pubescens.
767.
768.
769. Ladenbergia. Alto Chambuscado, northwest of Sonson, elev. 9200 ft., May 26.
770. Elev. 8500 ft.
771. Melastomaceae. Alto Capiro, northwest of Sonson, elev. 9200 ft.
772. Cinchona pubescens. Alto Capiro, headwaters of Quebrada Naranjal, elev. 9100 ft.
773. Rubus. Elev. 9100 ft.
774.
775. Viola. Alto Chambuscado, northwest of Sonson, elev. 9700 ft.
776. Viburnum.
777. Cinchona pubescens. Finca Capiro, elev. 9100 ft.
778. Sisyrinchium.
779. Tritoma. Along roadside, Alto Roblelita, southwest of Sonson, elev. 8800 ft. May 27
780. Plantago. Elev. 9700 ft
781. Rubiaceae. Elev. 9800 ft.
782. Phyllanthus. Elev. 9800 ft.
783. Ericaceae. elev. 9800 ft.
784. Rubiaceae. Elev. 9200 ft.
785. Melastomaceae.
786. Cinchona pubescens. Elev. 9200 ft.
787. Cinchona officinalis. Along camino between Sonson and Argelia about 5 km. east of Paramo, elev. 2180 m., May 29. Dept. Antioquia.
788. Cinchona pubescens. Along camino between Sonson and Argelia about 6 km. east of Paramo, elev. 2040 m.
789. Cinchona pubescens. Along camino between Sonson and Argelia at point called Vibora, elev. 1810 m.
790. Galium.
791. Ladenbergia.
792. Palicourea. Along camino between Sonson and Argelia about 3 mi. west of Argelia, elev. 1630 m., dept. Antioquia.
793. Scleria.
794. Gramineae. In camino 1-2 km. west of Argelia, elev. 1580 m., May 30.
795.
796. Boraginaceae.
797. Borreria laevis.
798. Lycopodium.
799. Eleocharis.
800. Panicum.
801. Gramineae.
802. Compositae.
803. Gesneriaceae.
804. Palicourea. In camino between Argelia and Alto del Tigre, elev. 1600 m., May 31.
805. Gramineae.
806. Polypodiaceae.
807.
808. Scleria.
809. Cinchona pubescens. Elev. 1500 m.

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810. Hydrangea. In camino between Argelia and Alto del Tigre, elev. 1620 m., dept. Antioquia, May 31, 1944.
811. Tropaeolum.
812.
813. Becquerelia.
814. Scleria secans. Along camino between Alto del Tigre and El Socorro, elev. 1710-900 m., June 1, 1944.
815.
816.
817.
818.
819.
820. Palicourea.
821. Selaginella. In camino between El Socorro and Mulato, elev. 900-400 m., June 2.
822. Scleria melaleuca.
823. Selaginella.
824.
825.
826.
827.
828.
829. Remijia. Camino between Mulato and Pecuaria, elev. 340 m., June 3.
830.
831.
832. Remijia.
833.
834.
835. Palicourea. In camino between Pecuaria and San Miguel, elev. 300-200 m.
836. Scleria melaleuca.
837. Eclipta alba. San Miguel, along shores of Rio La Miel. June 4.
838. Tree. Between Pato and San Juan, dept. Antioquia, elev. 350 m., June 20, 1944.
839. Remijia.
840. Cyperus.
841. Scleria.
842. Scleria.
843. Fuirena ? Cruces de Caceres, elev. 570 m., June 22.
844. Fimbristylis ?
845. Cyperaceae.
846. Cyperus.
847. Cyperus.
848. Melastomaceae.
849. Cyperus.
850. Cyperus.
851.
852. Scleria melaleuca.
853.
854.
855. Palicourea.
856. Palicourea.
857. Remijia. East of Cruces, elev. 580 m.
858. Loranthaceae.
859. Remijia.
860. Remijia.

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861. Remijia. West of Cruces de Caceres, elev. 580 m., June 22, 1944.
862.
863. "Goma de perilla".
864. Remijia.
865.
866. Shrub. Between Cruces de Caceres and Quebrada Segovia, June 23.
867. Cyperus. In camino near Dos Bocas, dept. Antioquia, June 24.
868. Scleria. Along highway between Zaragoza and "Clarito"
869. Leguminosae.
870. Scleria melaleuca.
871. Malvaceae.
872. Scleria.
873. Herb. Chapa, near headwaters of Rio Quilcace, elev. 2300 m., dept. Cauca, July 10.
874.
875. Gramineae.
876.
877. Labiatae.
878.
879. Gramineae. Between Paispamba and Chapa, near headwaters of Rio Quilcace.
880
881. Quercus humboldtiana.
882. Carex. Along camino between Chapa and Alto Batanes, elev. 2500 m., July 11.
883. Cinchona pitayensis. Elev. 2640 m.
884. Compositae. Elev. 2850 m.
885. Cinchona pitayensis. Elev. 2640 m.
886. Calceolaria. Elev. 2850 m.
887. Elev. 2850 m.
888.
889. Uncinia.
890. Calceolaria.
891. Labiatae. Alto de Batanes, elev. 2900 m.
892. Polypodiaceae.
893. Carex. Between Chapa and Paispamba, elev. 2200 m., July 12.
894. Gramineae.
895. Befaria.
896. Cuphea.
897. Rubiaceae. Camino between Chapa and Rio Blanco at Quebrada Flautos, elev. 2720 m., dept. Cauca, July 13, 1944.
898. Calceolaria.
899. Rubus. In thicket at timberline, elev. 2800 m.
900. Orchidaceae. Quebrada Flautos, elev. 2720 m.
901. Galium.
902. Melastomaceae. Quebrada Flautos, elev. 2800 m.
903. Paramo de Sotara, elev. 3220 m.
904.
905. Geranium.
906.
907.
908. Luzula. Camino near paramo, elev. 3000 m.
909. Rynchospora. Paramo de Sotara, elev. 3220 m.
910. Above Rio Blanco, elev. 2600 m.
911. Eupatorium. Above Rio Blanco, elev. 2500 m.
912. Bryophyte. Paramo de Sotara. 3220 m.

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913. Galium. Near Rioblanco, elev. 2600 m., July 14, 1944, dept. Cauca.
914. Alnus.
915. Cinchona pitayensis. Finca Concordia, elev. 2750 m.
916. Elev. 2880 m.
917.
918. Elev. 2700 m.
919. Cinchona pitayensis. Finca Concordia, 2750 m.
920. "Ortiga". Near Rioblanco, on camino to Quebrada Osoguaico, July 15, 1944.
921. Carex.
922.
923. Melastomaceae. Elev. 2400 m.
924. Palicourea. Elev. 2800 m. Alto La Honda.
925. Boraginaceae. Alto La Honda, elev. 2800 m.
926.
926a.
927. Cinchona pitayensis.
928. Sambucus nigra. Finca Volador. Elev. 2480 m.
929. "Churillo".
930. Vicia. Camino between Rioblanco and Guachicono, July 17.
931.
932. Melastomaceae.
933. Epilobium. Camino between Guachicono and Quebrada Vellones, July 18, elev. 2500 m.
934.
935.
936.
937. Cuphea. Elev. 2900 m.
938. Orchidaceae.
939. Melastomaceae. Cordillera Vellones, elev. 3100 m.
940. Quebrada Vellones, elev. 2800 m.
941.
942.
943.
944.
945.
946.
947.
948. Cruciferae.
949.
950. Cinchona pitayensis. Head of Rio Putis, elev. 2820 m.
951. Bomarea. Elev. 2800 m.
952. Cyperaceae. Cordillera Vellones, elev. 3100 m.
953. Rio Putis, elev. 2900 m.
954.
955. Camino between Guachicono and Cordillera Vellones, elev. 2800 m.
956. Orchidaceae. headwaters of Rio Putis, elev. 2900 m.
957.
958.
959. Rio Putis headwaters, elev. 2800 m.
960.
961. Elev. 2900 m.
962.
963. Viola. Head of Rio Putis, elev. 2900 m.
964. Labiatae. Along camino near Guachicono, elev. 2700 m.

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965. Paramo de las Barbillas, south of Guachicono, dept. Cauca, elev. 3100 m., July 19, 1944.
966.
967.
968.
969.
970. Lupinus.
971. Rynchospora.
972.
973. Bomarea.
974.
975.
976. Espeletia.
977.
978. Castilleja.
979.
980.
981. Carex.
982.
983.
984. Iridaceae.
985. Juncus.
986. Ranunculus.
987. Hypericum.
988.
989. Headwaters of Rio Caqueta, elv. 2900 m., July 19.
990.
991. Between Guachicono and Paramo de las Barbillas, elev. 2900 m., July 19.
992. Datura.
993. Compositae. Wet sabana of frailejones in Valle de las Papas near Valencia, elev. 2700 m., July 20, 1944.
994. Plantago.
995. Compositae.
996.
997.
998. Rubus.
999. Xyris.
1000. Juncus.
1001. Cladonia.
1002. Lobelia.
1003. Cyperaceae.
1004. Juncus.
1005. Lycopodium.
1006. Musci. Growing on thatched roof of house in Valle de las Papas, elv. 2700 m.
1007. Lobelia. Valle de las Papas, dept. Cauca, elev. 2700 m., July 21, 1944.
1008.
1009.
1010. Solanum.
1011. Solanum.
1012. Rubus.
1013. Shrub. Along camino between Valencia and San Sebastian, east slope of mountain, elev. 2700-3000 m., July 21.

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1014. Boraginaceae. Along camino between Valencia and San Sebastian, east slope of
B mountain, elev. 2700-3000 m., July 21, 1944.
1015. Galinsoga ?
1016.
1017. Gramineae.
1018. Same locality, but west side of mountain, elev. 2500-3000 m.
1019.
1020.
1021. Gramineae. On dry roadbanks near San Sebastian, elev. 2200 m., July 21.
1022. Musci.
1023. Ladenbergia. Along Rio Grande, camino between San Sebastian and San Andres,
elev. 2500 m., July 23, 1944.
1024. Cinchona officinalis. Along Rio Grande near San Andres, elev. 2200 m., July 24.
1025. Ladenbergia (Cinchona henleana). Along trail, San Andres to Santa Rosa, near
Rio Grande, elev. 2150 m.
1026. Cinchona pubescens. Between Quebrada Curuyaco and Santa Rosa, along Rio
Caqueta, elev. 1840-1700 m., July 24.
1027. Psychotria ?
1028.
1029. Sanicula.
1030. Galium.
1031. Caryophyllaceae.
1032.
1033.
1034. Rynchospora.
1035. Rynchospora.
1036. Orchidaceae.
1037.
1038.
1039.
1040.
1041. Cinchona officinalis. La Vieja, overlooking Santa Rosa, July 25, 1944.
1042. Cinchona officinalis (tuna).
1043. Cinchona officinalis ("roja"). Elev. 2100 m.
1044. Cinchona officinalis ("roja"). Elev. 1900 m.
1045. Cinchona officinalis ("roja"). Elev. 1900 m.
1046. "Quassia".
1047. Cinchona officinalis. Bark sample.
1048. Cinchona officinalis. Bark sample.
1049. Cinchona pubescens. Along Rio Caqueta, camino between Carmelo and Rio Curuyaco,
elev. 1800 m., July 26, 1944.
1050. Cinchona pubescens. Along Rio Caqueta, camino between Santa Rosa and Carmelo,
elev. 1720 m.
1051. "Barbasco". Santa Rosa, elev. 1700 m.
1052. Near Carmelo, elev. 1800 m.
1053. Cleome. Roadside near Santa Rosa, elev. 1800 m.
1054. Cinchona pubescens. Camino between Rio Curuyaco and Rio Grande, elev. 2200 m.
1055. Solanum. Along or near Rio Grande, camino between San Andres and Alto Todos
Santos, elev. 2400-2700 m., July 27, 1944.
1056. Rynchospora.
1057. Carex.
1058.
1059. Eleocharis.
1060.

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1061. Between Alto Todos Santos and San Sebastian, elev. 2300 m., July 27.

1062.
1063. Lichen.
1064. Lcopodium. Along or near Rio Grande, camino between San Andres and Alto Todos Santos, elev. 2400-2700 m., July 27.
1065. San Sebastian, dept. Cauca, July 28, 1944.
1066. Eresine celosia.
1067.
1068. Phytolacca.
1069. Rosaceae.
1070. Camino between San Sebastian and Bolivar, near Rio Negro, elev. 1600 m., July 29, 1944.
1071. Macrocnemum. Elev.2000 m.
1072. Tree. Along Rio San Jorge, near San Sebastian, elev. 1500 m.
1073. Camino near Rio Negro, elev. 1500 m.
1074. Malpighiaceae ? Along camino, north slope of Cerro Gordo, elev. 1700 m.
1075. Cosmibucha. Quebrada Ortega, west of Cajibio, elev. 1520 m., August 24, 1944.
1076. Cosmibuena.
1077. Camino near Ortega, elev. 1800 m.
1078.
1079.
1080.
1081. La Laguna, elev. 1800 m.
1082. Scleria bracteata. Rio Cauca at Dinde, elev. 1260 m.
1083. Finca La Cumbre, Cordillera Occidental, head of Quebrada La Florida, headwaters of Rio Dinde, elev. 2700 m., August 25.
1084. Polygonaceae.
1085. Rubus.
1086. Palicourea.
1086a.
1087. Viburnum.
1088. Solanaceae.
1089. North slopes of La Cumbre, Pico de Aguila, Rio Agau Clara drainage, elev. 2700 m., August 26.
1090.
1090a. Gnaphalium. (south slopes)
1090b. Moss. (south slopes)
1091. Cinchona pitayensis.
1092.
1093.
1094. "Pino colombiano".
1095. Caryophyllaceae.
1096. Bryophyte.
1097.
1098. Ladenbergia.
1099. Cinchona pitayensis.
1100. Balanophoraceae.
1101. Quebrada Los Andes, La Cumbre, near finca of Zoilo Campo, west of Pico de Aguila, elev. 2750 m., August 27.
1102. Cinchona pitayensis. Elev. 2750 m.
1103.
1104. Lycopodium.
1105.
1106.
1107.

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1108. Between La Cumbre and Quebrada La Isla, headwaters of Rio Dinde, elev., 2700 m., August 28, 1944.
1109. Elev. 2600 m.
1110.
1111. Solanum.
1112. Elev. 2500 m.
1113. Viola.
1114. Viola. Elev. 2400 m.
1115.
1116. "Molasses grass".
1117.
1118. Carex. Elev. 2000 m. At Quebrada Obscuridad.
1119. Elev. 2300 m.
1120. Elev. 2000 m.
1121. Rynchospora. Elev. 2000 m. Quebrada Obscuridad.
1122. Euphorbiaceae. Elev. 2200 m.
1123. Elev. 2000 m. Between Quebradas Obscuridad and La Isla.
1124.
1125.
1126.
1127. Cinchona pubescens.
1128. Ladenbergia. Quebrada Ortega, elev. 1700 m., August 29.
1129. Elev. 1650 m.
1130. Elev. 1600 m.
1131.
1132. Gramineae. Elev. 1500 m.
1133. Lycopodium. Rim of canyon of Rio Cauca east of Dinde, elev. 1550 m.
1134. Ladenbergia. Between Quebrada Ortega and La Laguna, elev. 1780 m.
1135. Quebrada Ortega, elev. 1500 m.
1136.
1137.
1138.
1139.
1140. Quercus humboldtiana. Quebrada La Isla, elev. 2000 m.
1141. Between Quebrada La Isla and Quebrada Ortega, elev. 1700 m.
1142. Quebrada Ortega, elev. 1500 m.
1143. Ladenbergia. Quebrada Ortega, elev. 1700 m.
1144.
1145.
1146.
1147. "Lava platos". Patia Valley near Patia, September 7, 1944. Dept. Cauca. Elev. 640 m.
1148. Elev. 600 m.
1149. Canavalia. Rio Capitanes, elev. 1000 m.
1150. Phaseolus. Rio Capitanes. Elev. 800 m.
1151. "Buenas tardes". Compositae. Trail near Patia, elev. 625 m.
1152. Scleria bracteata. Bewteen Olaya and San Alfonso, Rio Capitanes, elev. 1000 m.
1153. Cassia. Rio Patia. Elev. 600 m.
1154. Ladenbergia. Between Olaya and San Alfonso, Rio Capitanes, elev. 1250 m.
1155. Lobeliaceae. San Alfonso, elev. 1800-2000 m.
1156. Piperaceae.
1157. Compositae.
1158. Moneima.
1159. Rubiaceae.
1160. Piperaceae.
1161. Lobeliaceae.
1162. Psychotria ?
1163. Lobeliaceae.

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1164. "Cardo santo". San Alfonso, elev. 1800-2000 m. Sept. 8, 1944. Dept. Cauca.
1165. Compositae.
1166. Asclepiadaceae.
1167. Uncinia.
1168. Gnaphalium.
1169. Crotalaria.
1170. Melastomaceae.
1171. Eupatorium.
1172. Rubiaceae.
1173. Rubiaceae.
1174. Psychotria ?
1175. Cerastium ?
1176. Bocconia frutescens.
1177. Palmae.
1178.
1179. Psychotria ?
1180.
1181.
1182. Psychotria.
1183. Apocynaceae.
1184. Solanum galeatum. ("Tomate de arbol").
1185.
1186. Rubiaceae.
1187. Hedyosmum granizo.
1188. Solanum. "Guinda".
1189. Anona.
1190. Eugenia.
1191. "Aguacatillo".
1192. "Totocal".
1193. Cerro San Pedro and its slopes, elev. 2880 m., Sept. 10.
1194. Isertia. Elev. 2750 m.
1195. Rubiaceae. Elev. 2520 m.
1196. Cinchona pitayensis. North of Ce ro San Pedro, elev. 2750 m.
1197. Lobeliaceae. Elev. 2540 m. South slopes.
1198.
1199. Valerianaceae. Near camp, elev. 2500 m.
1200. South slopes.
1201. North slopes. elev. 2750 m.
1202. Cinchona pitayensis. South slopes, elev. 2540 m.
1203. Berberis. 2600 m.
1204. Palicourea. Northwest slopes, elev. 2730 m.
1205. "Pasto Micay". North slopes, elev. 2800 m.
1206.
1207. Elev. 2700 m.
1208.
1209. Elev. 2800 m.
1210. Elev. 2750 m.
1211. Elev. 2700 m.
1212.
1213. Cinchona pitayensis.
1214. Cinchona pitayensis.
1215. Rubiaceae.
1216. Cinchona pitayensis. North slopes, elev. 2750 m.

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1217. Moss. Cerro San Pedro and its slopes, west of El Bordo, dept. Cauca, elev. 2660 m., September 10, 1944.
1218. Weinmannia. Elev. 2880 m.
1219. Drimys granatensis. Elev. 2880 m.
1220. Rynchospora.
1221a. "Yolombo".
1221. Camp Cerro San Pedro, elev. 2520 m., September 11.
1222. Between Cerro San Pedro and San Alfonso, on top of cordillera, elev. 2500-2700 m.
1223. Lobeliaceae. Sept. 11.
1224. Cinchona. Elev. 2480 m.
1225. Elev. 2500-2700 m.
1226. "Yolombo".
1227. Hypericum laricifolium.
1228. Freziera chrysophylla. "Motilon".
1229. Freziera chrysophylla.
1230. "Guazguin".
1231. Gramineae.
1232. Lobeliaceae.
1233. "Amarillo pena".
1234.
1235. Rubiaceae. Along Quebrada Puente de Tierra above Argelia, dept. Cauca, elev. 1300 m., September 13, 1944.
1236. Solanum.
1237. Elev. 1300 m.
1238. Condaminea corymbosa. Elev. 1600 m.
1239.
1240. Solanaceae.
1241. "Jigua".
1242. "Jigua".
1243. "Guayacan".
1244. Anona. Elev. 2000 m.
1245. Headwaters of Rio Turbio, elev. 2200 m., Sept. 13.
1246. Near Puente de Tierra, elev. 2200 m. Sept. 13.
1247. Solanaceae. Quebrada Puente de Tierra, elev. 2100 m., Sept. 13.
1248. Elev. 2200 m. Near Puente de Tierra.
1249.
1250. Quebrada Puente de Tierra, 2100 m., Sept. 13.
1251. At Argelia, elev. 1220 m., Sept. 14.
1252. Rubiaceae. Along Rio San Juan above Argelia, elev. 1500 m.
1253. Headwaters of Rio San Juan, slopes of Cerro Bello, elev. 1700 m.
1254. Along Rio San Juan above Argelia, elev. 1400 m.
1255. Cosmibuena. Quebrada de la Laguna, elev. 1700 m.
1256.
1257. Rubiaceae. Quebrada de la Laguna, elev. 2000 m., Sept. 15.
1258. Quebrada de la Laguna, elev. 1800 m.
1259.
1260. Quebrada de la Laguna, elev. 1650 m.
1261. Elev. 1800 m.
1262. Elaeagia. Elev. 1650 m.
1263.
1264. "Hoja santa". Quebrada de la Laguna, elev. 2000 m.
1265. Cinchona pitayensis. We t slopes of Cerro Bello, headwaters of Rio Guaitara, elev. 2700 m., Sept. 16, 1944.

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1266. Summit of peak near Cerro Bello, elev. 3020 m., Sept. 16.
1267.
1268.
1269. Compositae.
1270. Hypericum.
1271. Headwaters of Quebrada de la Laguna, elev. 2500 m.
1272. Gramineae. Slopes of Cerro Bello, elev. 2800 m.
1273. Weinmannia. Summit of peak near Cerro Bello, elev. 3020 m.
1274. Rosaceae.
1275. Compositae.
1276. Bomarea. Near summit of Cerro Bello, elev. 29 00 m.
1277. Gramineae.
1278. Gramineae.
1279. Gramineae.
1280. Rubiaceae. Elev. 2500 m.
1281. Rubiaceae. Elev. 3020 m.
1282. Camp Cerro Bell, elev. 2120 m.
1283. Cinchona pubescens. Headwaters of Rio Guaitara near La Depresion, elev. 2400 m., dept. Cauca., September 17, 1944.
1284. Melastomaceae.
1285.
1286. Bromeliaceae. Elev. 2500 m.
1287. Headwaters of Quebrada de la Laguna, elev. 2120 m.
1288. Elev. 2200 m.
1289. "Cedro". Elev. 2360 m.
1290. Palicourea. Head of Rio Guaitara, elev. 2250 m., Sept. 18.
1291. Araceae. Elev. 2000 m.
1292.
1293. Rubiaceae. Elev. 2250 m.
1294. Araliaceae. Elev. 2000 m.
1295. Araliaceae. Elev. 1620 m.
1296. Rubiaceae. Elev. 2000 m.
1297. Rubiaceae. Elev. 2310 m.
1298. Cinchona pubescens. Elev. 2310 m.
1299. Heliconia. Elev. 1620 m.
1300. Rubiaceae.
1301. Sept. 19.
1302. Ladenbergia. Elev. 1560 m., along Rio Guaitara.
1303. Macrocnemum.
1304. Joosia.
1305. Macrocnemum. Along Rio Guaitara, elev. 1550 m.
1306.
1307. Condaminea.
1308. Elev. 1560.
1309. Elev. 1500 m.
1310. Rubiaceae. Elev. 1560 m.
1311. "Jigua". Elev. 1500 m.
1312. Orchidaceae.
1313. Hepaticae.
1314. Joosia. Elev. 1550 m.
1315. Elev. 1350 m.
1316. Asclepiadaceae. Elev. 1480 m.
1317. Polypodiaceae. Elev. 1550 m.
1318. "Morichillo". Elev. 1500 m.

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1319. Melastomaceae. Along footpath between Rio San Juan (at Quebrada Las Naranjas) and Quebrada Agua Clara, dept. Cauca, elev. 1500 m., Sept. 21.
1320a.
1320b.
1321. Monotropa. Elev. 1600 m.
1322.
1323. Solanum. Along Rio Pinche, elev. 1480 m., September 23, 1944.
1324. Headwaters of Rio Pinche, elev. 1870 m.
1325. Headwteras of Rio Timbiqui, at bas eof Cerro Pinche, elev. 1890 m., Sept. 24.
1326. La Depresion at base of Cerro Pinche, elev. 1800 m.
1327. Rubiaceae.
1328. Rubiaceae.
1329. Elev. 2000 m., September 25, 1944.
1330.
1331.
1332.
1333.
1334.
1335.
1336.
1337.
1338.
1339.
1340.
1341.
1342. Loranthaceae.
1342. "Chusquea."
1344. Orchidaceae.
1345. Fern.
1346.
1347.
1348.
1349. Orchidaceae.
1350. (No collection).
1351. Orchidaceae.
1352. Orchidaceae.
1353. Towards south end of La Depresion between Cerro Pinche and Cerro Plateado complex, elev. 1980-2440 m., Sept. 26.
1354.
1355.
1356.
1357.
1358.
1359.
1360. Cinchona pubescens. Elev. 1960 m.
1360a. Cinchona pubescens.
1361. Polytrichum.
1362. Moss.
1363. Moss.
1364. Bomarea,
1365. Fern.
1366. Rubiaceae. Elev. 1960 m.

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1367. Along Rio Pinche near headwaters, elev. 1960 m., Sept. 27, 1944.
1368. Bromeliaceae. Elev. 1740 m.
1369. Polypodium. Elev. 1330 m.
1370. Cladium ? Elev. 1330 m.
1371. Napania ? Elev. 1300 m.
1372. Gesneriaceae. Elev. 1300 m.
1373.
1374.
1375.
1376. Along Rio Pinche near camp Chontaduro, elev. 1030 m., Sept. 28.
1377. Along Quebrada Aguaclara near its junction with Rio Plateado, elev. 1100 m.
1378.
1379. Lycopodium. Collected on slopes of Cerro Plateado, elev. 2600-3000 m., by Carlos Hutter and Rafael Hurtado, Sept. 20-29.
1380. Iridaceae.
1381. Cinchona pubescens.
1382. Ericaceae.
1383.
1384.
1385. Gesneriaceae.
1386. Cladonia.
1387.
1388. Rubiaceae.
1388a. Rubiaceae.
1389. Orchidaceae.
1390. Orchidaceae.
1391. Loranthaceae.
1392. Balanophoraceae. Collected by Hutter and Hurtado, Rio Guaitara, elev. 1600 m.
1392a. Cinchona pitayensis. Cerro Plateado, Hutter and Hurtado.
1392b. Rubiaceae. Hutter and Hurtado.
1393. Cinchona pitayensis.
1393a. Cinchona pitayensis.
1394. Araceae.
1395. Rynchospora.
1396.
1397. "Jigua".
1398.
1399. Vitis.
1400.
1401. Rio Guaitara, elev. 1350 m. Hutter and Hurtado.
1402. Rubiaceae. Along Rio San Juan near Argelia, collected by J.S.Granger, elev. 1200, Sept. 29, 1944.
1403. (From this point forward collections are by Earl L. Core) Near Las Naranjas, elev. 1700 m., Sept. 28.
1404.
1405. "Canime". Near Las Naranjas, elev. 1500 m., Sept. 29.
1406. Rubiaceae.
1407. Scleria melaleuca. Along Rio San Juan below Argelia, elev. 900 m.
1408. "Jigua". Along Rio San Juan below Argelia, elev. 1200 m., Sept. 30.
1409. Stachytarpheta.
1410. Macrocnemum.
1411. Cosmibuena.
1412.
1413. Cyperus.
1414.
1415. Asclepias curassavica.
1416. Condaminea corymbosa.

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1417. Cinchona pubescens. Near Leiva.
1418. Cinchona.
1419. "Barbasco". Bejuco.
1420. Bomarea. Quebrada Puente de Tierra, elev. 1800 m., October 1, 1944.
1421. Peperomia, Elev. 1900 m.
1422. Carex. Elev. 1700 m.
1423. 1423a. Cosmibuena.
1424. Scleria. Rio Capitanes near San Alfonso, elev. 1420 m., Oct. 3.
1425. Along camino near San Alfonso, dept. Cauca, elev. 1800 m.
1426. Melastomaceae. Quebrada Las Tayas, elev. 1100 m., Oct. 3.
1427. Cinchona pubescens. Quebrada Las Tayas, elev. 1320 m.
1428. Scleria bracteata. Rio Capitanes, elev. 1450 m.
1429. Clitoria. Quebrada Las Tayas, elev. 1000 m.
1430. Guazuma ulmifolia. Rio Patia near El Bordo, elev. 700 m.
1431. Cinchona pitayensis. Bark sample.
1432. Compositae. Moscopan.
1433. Compositae.
1434. Gnaphalium.
1435. Paramo of Purace, elev. 3000 m., Oct. 11, 1944.
1436.
1437. "Romero".
1438.
1439.
1440. "Arnica".
1441. Bomarea.
1442. Bromeliaceae.
1443. Compositae.
1444. Carex.
1445. Carex.
1446. Gramineae.
1447. Cyperaceae.
1448. Compositae.
1449. Compositae.
1450.
1451. Geranium.
1452. Cladonia.
1453.
1454. Carex. Hot sulfur baths.
1455. Ericaceae. Hot sulfur baths.
1456. Collected by Rafael Hurtado in the Moscopan region, dept. Cauca, Oct. 7-11.
1457.
1458. Cinchona pubescens.
1459. Ericaceae.
1460.
1461.
1462. Cinchona officinalis.
1462a.
1463.
1464.
1465. Rubiaceae.
1466. Rubiaceae.
1467. Espeletia. Elev. 2120 m.
1468. Orchidaceae. (End of collection of Rafael Hurtado).

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1469. Rubiaceae. Queremal, Valle del Cauca dept., elev. 1380-1500 m., Oct. 2[illegible], 1944.
1470. Chusquea.
1471. Lobeliaceae.
1472. Orchidaceae.
1473. Shrub.
1474. Zingiberaceae.
1475. Gesneriaceae.
1476. Rubiaceae.
1477. Apocynaceae.
1478. Epiphyte.
1479. Orchidaceae.
1480. Lobeliaceae.
1481. Epiphyte.
1482. Herb.
1483. Mikania ?
1484. Gesneriaceae.
1485. Cucurbitaceae.
1486. Shrub. Dense forest above Finca Tokio, near Queremal, Oct. 29, 1800-1900 m.
1487.
1488.
1489.
1490. Cyclanthaceae.
1491. Cinchona pubescens.
1492. Bromeliaceae.
1493.
1494. Orchidaceae.
1495.
1496.
1497.
1498.
1499.
1500. Begonia.
1501. "Nacedera". Head of Rio San Juan, near Queremal, elev. 1500 m., Oct. 29.
1502. Acalypha.
1503. "Jigua".
1504. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, Valle del Cauca dept., November 6, 1944.
1505. Orchidaceae.
1506. Rubiaceae.
1506.
1507. Utricularia.
1508.
1509. Cyperus.
1510.
1511. Halenia ?
1512. Xyris.
1513. Cyperaceae.
1514. Gramineae.
1515.
1516. Solanaceae.
1517.
1518. Fern.
1519.
1520. Scleria melaleuca.

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1521. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, dept. Valle del Cauca, November 6, 1944.
1522.
1523.
1524. Polygala.
1525. Ploygala micrantha ?
1526.
1527. Malvaceae.
1528.
1529. Solanaceae.
1530. Cyperus.
1531.
1532.
1533.
1534.
1535. Lantana.
1536.
1537. Cyperus.
1538.
1539.
1540.
1541. Trail from Cordoba to Quebrada La Brea, dept. Valle del Cauca, elev. 50-100 m., November 7, 1944.
1542.
1543. Gesneriaceae.
1544. Gesneriaceae.
1545.
1546. Cinchona barbacoensis.
1547.
1548. Cinchona barbacoensis.
1549. Compositae.
1550.
1551. Cyperaceae.
1552.
1553. Gesneriaceae.
1554. Cinchona barbacoensis.
1555. Cinchona barbacoensis.
1556. Cinchona barbacoensis.
1557.
1558.
1559.
1560.
1561.
1562. "Corazon herida". In flower garden at Cordoba, November 7.
1563. Hibiscus.
1564. "Flor de diablo".
1656. Locality same as 1541.
1566. Fern. In flower garden at Cordoba.
1567. Along coast of Pacific Ocean at mouth of Buenaventura Bay, Nov. 8.
1568. Rhizophora.
1569.
1570. Apocynaceae.
1571.

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1572. Along railway at Dagua, Valle del Cauca dept., Nov. 9.
1573. Labiatae.
1574. Quebrada Santa Barbara near Florida, Valle del Cauca dept., Nov. 15, elev. 1500 m.
1575.
1576. Pluchea.
1577.
1578. Elev. 1700 m.
1579. Elev. 2200 m.
1580. Cavendishia. Elev. 2600 m.
1581. Cladonia. Elev. 2100 m.
1582. Bocconia. Elev. 2600 m.
1583. Cavendishia. Elev. 2700 m.
1584. Bocconia.
1585.
1586. Ludehbergia. Elev. 2800 m.
1587. Compositae. At top of cordillera central, 3600 m., Florida-Herrera camino, just within dept. of Tolima, Nov. 16.
1588. Gentianaceae.
1589.
1590. Luzula.
1591. Carex.
1592. Rubiaceae. Rio Hereje, near Auxilio, dept. Tolima, Nov. 17, elev. 2500 m.
1593.
1594. ?
1595. ?
1596. Cinchona pubescens. Rio Saldana, dept. Tolima, elev. 1600-1800 m., Nov. 19.
1597. Rubiaceae.
1598. Lobeliaceae.
1599.
1600. Fern.
1601. Lobeliaceae.
1602. Gesneriaceae.
1603. Rubiaceae.
1604. Lobeliaceae.
1605. Lobeliaceae.
1606. Lobeliaceae.
1607. Lobeliaceae.
1608. Moneima.
1609. Gesneriaceae.
1610. Lobeliaceae.
1611. Lobeliaceae.
1612. Gymnospermae.
1613.
1614. Rubiaceae.
1615.
1616. Thalictrum. Rio Hereje, dept. Tolima, near Albania, elv. 2470 m., Nov. 20.
1617. Elev. 2400 m.
1618. Rubiaceae.
1619. Elev. 2000 m.
1620. Loasaceae.

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1621. Paramo between Auxilio and top of cordillera, elev. 11000 ft., dept. Tolima, November 21, 1944.
1622.
1623.
1624. Compositae. Along Rio Hereje above Auxilio, elev. 2800 m.
1625. Galium. Along Rio Hereje near Auxilio, elev. 2700 m.
1626. Sisyrinchium. Between Auxilio and top of cordillera, in paramo, elev. 11000 ft.
1627. Compositae.
1628.
1629. ?
1630.
1631. In paramo, elev. 10,000 ft.
1632.
1633.
1634. Ribes. Along Rio Hereje above Auxilio, elev. 9000 ft.
1635. Gesneriaceae.
1636. Paramo at head of Quebrada Santa Barbara, above Abelina, in dept. Valle del Cauca, Nov. 21, elev. 11000 ft.
1637. Espeletia. Elev. 11,000 ft.
1638. Elev. 10,000 ft.
1639.
1640. Arnica.
1641. Elev. 11,000 ft.
1642. Near Abelina, elev. 10,000 ft.
1643. In paramo above Abelina, elev. 11,000 ft.
1644.
1645.
1646.
1647. In paramo at head of Rio Hereje, in Tolima, elev. 11,000 ft.
1648. Puya.
1649. El Pedregal, near Florida, elev. 1200 m., dept. Valle, Nov. 22.
1650. Solanum. Along Quebrada Santa Barbara, east of Florida, elev. 1650 m.
1651. Berberis. In paramo near Abelina, elev. 10,000 ft.
1652.
1653. Luffa. Cali, Dec. 9. This and the following collected by Rafael Hurtado.
1654. Labiatae. Near Barragan, elev. 2825 m.
1655.
1656. Rio Tulua, elev. 1500 m.
1657. Rio Loro, head of Rio Tulua, 2800 m.
1658.
1659. Cinchona pubescens. Rio Loro, head of Rio Tulua, elev. 3000 m.
1660. Rio Tulua, elev. 1500 m.
1661. Asclepiadaceae. Sevilla, elev. 1520 m.
1662. Datura. Sevilla, Rio Bugalagrande, elev. 1520 m.
1663. Typha. Rio Loro, elev. 2800 m.
1664. Sevilla, elev. 1520 m.
1665. Rio Bugalagrande, elev. 1550 m.
1666. Sevilla, elev. 1530 m.
1667. Sevilla, elev. 1530 m.

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1668. Labiatae. Along Rio Guengue, near Corinto, dept. of Cauca, elev. 1400 m., Dec. 1-7, 1944. This and the following collected by Carlos Hutter.
1669. Labiatae. Elev. 1500 m.
1670. Caryophyllaceae. Elev. 1600 m.
1671. Leguminosae. Elev. 1560 m.
1672. Elev. 1650 m.
1673.
1674.
1675. Nicotiana. Elev. 2100 m.
1676. Elev. 1650 m.
1677. Cinchona pubescens. Elev. 2320 m.
1678. Cinchona pubescens. Elev. 2360 m.

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WASHINGTON, D. C.

S.C. plants

Box no

1 - 52 kg

2 - 55 kilos

3 - 71 kilos

10 - 50 kilos

11 } 30 kilos ?
20 }

258

7.2

516

516

5676 lbs.

#12 each
US Army

PLANT COLLECTIONS MADE BY EARL L. CORE IN THE REPUBLIC OF COLOMBIA
DURING THE PROGRESS OF EXPLORATIONS FOR CINCHONA

1. Ericaceae — In pass, Cordillera Oriental, along highway from Bogota to Villavicencio, elev. about 10,000 ft., dept. Cundinamarca, Nov. 7, 1943
2. Rosaceae
3. Espeletia
4. Hedyotis
5. Pipalanthus
6. Lupinus
7. Eupatorium
8. Oxalis
9. Valerianella
10. Gramineae
11. Rubiaceae
12. Cyperaceae
13. Luzula
14. Rubiaceae
15. Rubiaceae
16. Pipalanthus
17. Orchidaceae
18. Ericaceae
19. Hypericum
20. Melastomaceae
21. Lycopodium
22. bamboo
23. Gramineae
24. Gramineae
25. Senecio, probably abietinum
26. Halenia
27. Gramineae
28. Sisyrinchium
29. Gentiana
30. Geranium
31. Blechnum arboreum
32. Castilleja
33. Befaria
34. Gaultheria
35. Ericaceae
36. Madia
37. Gnaphalium
38. Compositae
39. Ericaeaea
40. Gnaphalium
41. Compositae
42. Bartsia
43. Compositae, Aster or near relative
44. --- Silvia, along Rio Piendamo, elev. about 2500 m. dept. Cauca, Nov. 16, 1943
45. Rubus
46. Viola
47. Cinchona pitayensis

FOREIGN ECONOMIC ADMINISTRATION

48. Cinchona pitayensis. In plantation of Miguel Cálambas, Pitayo, elev. 2800 m., November 17, 1943
49. Tree , summit of pass on trail between Silvia and Pitayo, elev. 3000 m., November 17, 1943
50. Hypericum
51. Tree
52. Shrub
53. Shrub
54. Bomarea
55. Gnaphalium
56. Orchidaceae
57. Shrub
58. Melastomaceae
59. Semi-shrubby
60. Palicourea, west slope, on Hacienda Agoyan, about 12 km. east of Silvia, near paramo de las Letras, elev. 2980 m., in forest. Nov. 18, 1943
61. Cinchona pitayensis
62. Rubiaceae
63. Solanum, same locality as above, but pasture land, elev. 2800 m., Nov. 18, 1943
64. Melastomaceae
65. Melastomaceae
66. Tree with red flowers, Hacienda Ambochico, near Silvia, elev. about 2700 m., Nov. 18, 1943
67. Melastomaceae (Blakea?). In forest along Piendamo-Silvia highway, between Kms. 12 and 13, elev. 2460 m., Nov. 19, 1943
68. Cinchona pubescens
69. Tree
70. Cinchona pubescens. In open field along Piendamo-Silvia highway, between Kms. 15 and 16, elev. 2500 m., Nov. 19, 1943
71. Cinchona pubescens. Along trail, San Miguel to La Vega, 1 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
72. Tree
73. Eleocharis. Along highway at Dolores (Rosas), dept. Cauca, Nov. 24, 1943
74. Rynchospora
75. Cinchona pubescens. Along trail, San Miguel to La Vega, east-facing slope, 5 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
76. Cinchona pubescens. Along trail, San Miguel to La Vega, at summit of mountain, place called Campomento, on land of Gustavo Molano, elev. 2000 m. Nov. 26
77. Herb. Near La Vega, elev. about 7500 ft., Nov. 27, 1943, dept. Cauca
78. Shrub
79. Climber
80. Very common
81. Shrub,"fiambre"
82. Climber
83. On rocks
84. Shrub, "totocal"

FOREIGN ECONOMIC ADMINISTRATION

85. Gramineae. Mountain slopes near La Vega, Cauca, alt. about 7500 ft., Nov. 28,1943
86. Shrub
87. Salvia
88. Quercus Humboldtiana
89. Weed
90. Shrub
91. Scrambler
92. Vine
93. Gramineae
94. "Pispura"
95. Cuphea
96. Fern
97. Polygonaceae
98. Polygala
99. "Clabillo"
100. "Cerote"
101. Polygonum
102. Liliaceae
103. Oxalis
104. Orchidaceae. Summit of mountain on trail between La Vega and Caquiona, elev. 3000 m., Nov. 29, 1943 - dept. Cauca
105. Melastomaceae. Near Caquiona, dept. Cauca, Nov. 29, 1943
106. Clusia.
107. Rubus
108. Alnus ferrugineus
169. Viola
110. Viola
111. Scrambler
112. Rutaceae. "arrayan amargo". Along trail just west of San Sebastian, Nov. 30, 1943
113. Orchidaceae. Along trail between San Sebastian and Rosal, Nov. 30, 1943
114. Dodonaea viscosa. Sapindaceae. "Chamano".
115. "Cajon de chucha". Along ridge between Rio Ramos and Quebrada Meneses, 6 km. east of Rosal, dept. Cauca., Nov. 30, 1943
116.
117. Rubiaceae
118. Compositae
119. Shrub
120. Manihot esculenta. Along trail between Rosal and Bolivar, Dec. 1, 1943
121. Coffee
122. Herb
123. Leguminosae. Calliandra
124. Gramineae. Lasciacis
125.
126. Vine
127. "Totocal"
128.
129. Labiatae
130. Cinchona pubescens, elev. 2000 m.
131. Cinchona pubescens, elev. 2000 m.
132. Cinchona pubescens, elev. 2000 m.
133. Ladenbergia
134. Sample of bark of Cinchona pitayensis from quantity being harvested by Matias Delgado, Quebradilla, Caquiona, Nov. 29, 1943

FOREIGN ECONOMIC ADMINISTRATION

135. Ladenbergia. Sample of bark secured at Rosal, collected in mts. east of Santiago and Rosal, dept. Cauca, Nov. 30, 1943
136. Cinchona pubescens. Ramada de trompo de puerco, northwest of Chaux, elev. 2200 m., Dec. 8, 1943
137. Orchidaceae. Along trail from San Jose to Micay, elev. 2700 m. Dec. 8, 1943
138. Centropogon? Along trail from San Jose to Micay, elev. 2700 m. Dec. 8
139. Cinchona pubescens. Loma del Trueno, northwest of Chaux, elev. 2200 m. Dec. 8
140. Cinchona pitayensis. Near trail between San Jose and Micay, elev. 2500 m. Dec 8
141. Cinchona pubescens. Northwest of Chaux 1 km., elev. 2300 m. Dec. 8
142 . Northwest of Chaux 2 km., elev. 2400 m. Dec. 8
143. Orchidaceae
144. Orchidaceae. Along trail between San Jose and Micay, elev. 2700 m., Dec. 8, 1943
145. Cecropia. 2 km. south of Chaux, elev. 2000 m. Dec. 9, 1943
146. Cinchona pubescens. Near Gamboa. elev. 2040 m.
147. Cinchona pubescens. Along camino between Gamboa and San Jose, elev. 2040 m.
148. Cinchona pubescens. At San Jose, elev. 2420 m. Dec. 9, 1943
149. Cinchona pubescens. About 3 kms. south of Chaux, elev. 2220 m. Dec. 9
150. Cinchona pubescens. Quebradilla de Seguenguito, near Chaux, elev. 2120 m.
151. Cinchona pubescens. Quebrada de Seguenguito, near Chaux, elev. 2080 m
152. Cinchona pubescens. 4 kms. south of Chaux, elev. 2180 m.
153. Cinchona pubescens. Quebrada de Ortega, Dec. 9, elev. 2250 m.
154. Cinchona pubescens. Elev. 2300 m.
155. Cinchona pubescens. Elev. 2300 m.
156. Cinchona pubescens. Elev. 2300 m.
157. Cinchona pubescens. Elev. 2300 m.
158. Guanabana. 4 km. south of Chaux, elev. 2180 m. Dec. 9, 1943
159. "Bejuco arrayan". San Jose
160. Orchidaceae. 5 km south of Chaux, elev. 2200 m.
161. Cinchona pubescens. Near Gamboa, elev. 1960 m. Dec. 9, 1943
162. Cinchona pubescens. Finca La Julia, near Tacueyo, dept. Cauca, elev. 1850 m. Dec. 14
163. Cinchona pubescens. Elev. 2000 m.
164. Cinchona pubescens. Elev. 2050 m.
165. Cinchona pubescens. Elev. 2080 m.
166. Cinchona pubescens. Elev. 1900 m.
167. Cinchona pitayensis. Sample of bark from stock of Carlos Prieto, stored at Tacueyo.

168. Cinchona pubescens. Sample of bark from Calera, near Tacueyo, collected for Geirardo Prieto
169. Lantana camara. Fields at El Palo, dept. Cauca, December 15, 1943
170. Psidium
171. Eragrostis
172. Crotalaria
173. Paspalum
174. Scleria setacea
175. Canavalia
176. Herb. Along highway between Tunja and Santander, dept. Cauca, Dec. 29, 1943
177. Rosaceae. Rio Ovejas
178. Ladenbergia magnifolia. Rio Ovejas
179. Ladenbergia magnifolia. Rio Ovejas

180. Cinchona pubescens. At Pulecio, left side of Quebrada Chaguasguas, elev. 1900 m., Jan. 4, 1944, near Corinto, dept. Cauca
181. Cinchona pubescens. Elev. 2000 m.
182. Cinchona pubescens.
183. Cinchona pubescens.
184. Ladenbergia magnifolia. Elev. 1500 m., along Quebrada Chaguaguas
185. Cinchona pubescens. On ridge between Quebrada Chaguaguas and Q. Carrizal, "montana de la laguna", east of Corinto, elev. 2050 m., Jan. 5, 1944
186. Cinchona pubescens.
187. Cinchona pubescens.
188. Orchidaceae. On ridge between Quebrada Carrizal and Rio Paila, "en el camino salida el paramo", elev. 2000 m., Jan. 6, 1944
189. Moss
190. Drimys
191. Cinchona pubescens. Elev. 2000 m.
192. Cinchona pubescens. Elev. 2000 m.
193. Cinchona pubescens. Elev. 2000 m.
194. Orchidaceae
195. Cyperaceae. "La Playa", near home of Manuel Arango, near headwaters of Rio Guengue, Jan. 8, 1944, elev. 2300 m.
196. Orchidaceae
197. "Cedro"
198. "Incensio"
199. Ladenbergia
200. Cinchona pubescens.
201.
202. Cinchona pubescens. Quebrada de las Viejas., alt. 2050 m., 1½hrs ride from La Playa, Jan. 9, 1944
203. Cinchona pubescens.
204. Cinchona pubescens. Quebrada Carrizal, branch of Rio Guengue, elev. 1750 m.,Jan 9.
205. Rubiaceae
206. Tree. Along camino between Corinto and El Playa, Rio Guengue, 3 hrs. from Corinto, elev. 1500 m., Jan. 9, 1944.
207. Verbena. 5 kms. east of Purace, elev. 2650 m., Jan. 20, 1944.
208. Calceolaria. Elev. 2870 m.
209. Plantago.
210. Plantago.
211. elev. 2980 m.
212.
213.
214. Bomarea.
215. Senecio? Culcitium?
216. Castilleja. Wet paramo at 3000 m.
217. Swartia?
218. Lupinus.
219. Compositae.
220. Hypericum.
221. Alchemilla.
222. Senecio glaucifolia?
223. Fern.
224. Ericaceae.
225. Carex.
226. Bromus?
227. Moss
228. Bryophyte

FOREIGN ECONOMIC ADMINISTRATION

229. Bryophyte. Wet paramo east of Purace, elev. 3000 m., Jan. 20, 1944.
230. Bryophyte.
231. Bryophyte.
232. Bryophyte.
233. Carex.
234. Cyperaceae.
235. Cyperaceae.
236. Bomarea. 5 km. east of Purace, elev. 2650 m., Jan. 20, 1944.
237. Weed in pasture, finca of Henrique Mosquera, near Popayan, elev. about 1700 m.,Jan 21
238. Melastomaceae.
239. Ericaceae.
240. Polypodiaceae.
241. Ericaceae.
242. Gramineae.
243. Leguminosae.
244. Bidens.
245.
246. Scleria hirtella.
247. Begonia. Finca "El Bosque", elev. 2000 m., Cordillera Occidental west of Darien, dept. Valle del Cauca, Feb. 2, 1944.
248. Moss.
249. Hepaticae.
250. Fungus leaf spot.
251. Compositae.
252. Vine.
253. Passiflora.
254.
255.
256. Begonia.
257. Begonia.
258. Vine.
259. Bromeliaceae.
260. Hepaticae.
261. Hepaticae.
262. Piperaceae.
263. Liana.
264. Melastomaceae.
265. liana.
266.
267. Carex.
268. Cinchona pubescens.
269. Macrocnemum. Near Darien, 1500 m.
270. Orchidaceae. Elev. 2000 m.
271. Cinchona pubescens.
272. Sample of bark of Cinchona from deposito of Rafael Maya, Cali, Feb. 5, 1944.
273. Cinchona pubescens, east of Carmen, intendencia of El Choco, on old camino to Bolivar, elev. 2480 m., Feb. 26, 1944.
274. Sisyrinchium. Elev. 2440 m.
275. Cinchona pubescens. Elev. 2440 m.
276. Cinchona pubescens. Elev. 2440 m.
277.
278. Bryophyte. Elev. 2440 m.
279. Bryophyte. Elev. 2440 m.
280. Cinchona pubescens. Elev. 2340 m.

FOREIGN ECONOMIC ADMINISTRATION

281. Viola. East of Carmen, inten. of El Choco, on old camino to Bolivar, Alto de Aguada, elev. 2340 m., Feb. 26, 1944.
282.
283. "Fruta de sopa"
284. Lycopodium.
285. Piper.
286.
287. Epiphylls. Alto de Cortes, west of Carmen, El Choco, elev. 2600 m. Feb. 28, 1944.
288. Orchidaceae.
289. Orchidaceae.
290. Cryptogam.
291. Cryptogam.
292. Cryptogam.
293. Cryptogam.
294. Cryptogam.
295. Cryptogam.
296. Cryptogam.
297. Cryptogam.
298. Cinchona pubescens.
299. Balanophoraceae.
300.
301. Cinchona pubescens.
302. Cinchona pubescens. Elev. 2560 m.
303. Cinchona pubescens. Elev. 2525 m.
304. Cinchona pubescens. Elev. 2520 m.
305. Cinchona pubescens. Elev. 2600 m.
306. Rynchospora.
307. Rynchospora.
308. Rynchospora.
309. Uncinia.
310. Ladenbergia, probably undescribed. Alto de La Clara, northwest of Carmen, El Choco, 2640 m., Feb. 29, 1944.
311. Cinchona pubescens. Elev. 2300 m.
312. Cinchona pubescens. Elev. 2250 m.
313. Cinchona pubescens. Elev. 2230 m.
314. Cinchona pubescens. Elev. 2120 m.
315. Shrub. Paramillo, Alto de la Clara, northwest of Carmen, El Choco, elev. 2680 m., Feb. 29, 1944.
316. Lauraceae.
317. Ladenbergia.
318. Shrub.
319. Stevia ?
320. Burmeistera.
321. Gentianaceae.
322. Psychotria ?
323. Lichen.
324. Lichen.
325. Lichen.
326. Cyperaceae. ?
327. Orchidaceae.
328. Shrub. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
329. Fern.
330. Bryophyte.
331. Bryophyte.

FOREIGN ECONOMIC ADMINISTRATION

330a. Balanophoraceae. Alto de la Clara, northwest of Carmen, El Choco, elev. 2200 m., Feb. 29, 1944.
331a. Balanophoraceae.
332a. Balanophoraceae.
332. Section of tree fern.
333. Lycopodium(or Selaginella). Quebrada La Clara, northwest of Carmen, El Choco, elev. 1800 m., Feb. 29, 1944.
334. Macrocnemum.
335. Cinchona pubescens. Alto de Guaduas, Quebrada de Arboleda, elev. 2000 m., Mar. 1.
336. Cinchona pubescens. Elev. 2050 m.
337. Cinchona pubescens. Elev. 2000 m.
338. Macrocnemum. Quebrada de Arboleda, elv. 1700 m., Mar. 1, 1944, south of Carmen, El Choco.
339. Palicourea. Elev. 1700 m.
340. Bromeliaceae. Alto de Guaduas, elev. 2000 m.
341. Rondeletia.
342. Orchidaceae.
343. Columnea ?
344. Nertera granatensis. Quebrada de Arboleda, elev. 1800 m.
345. Bryophyte. Alto de Guaduas, elev. 2000 m.
346. Bryophyte.
347. Weed.
346a. Araceae.
347a. Meriana.
348. Piperaceae. Alto near Quebrada de Girardot, branch of Rio Atrato, elev. 1500-2000 m, March 2, 1944.
349.
350.
351.
352. Orchidaceae.
353. Solanaceae.
354. Orchidaceae.
355. Bromeliaceae.
356. Palicourea.
357.
358. Burmeistera. Rio Dauro, tributary of Rio Habita, east of Carmen, El Choco, elev. 2200 m., Mar. 3, 1944.
359. Cinchona pubescens. Quebrada La Ciria, branch of Rio Pabon, at Las Cruces, dept. Antioquia, elev. 2250 m., Mar. 7, 1944.
360. Cinchona pubescens. Elev. 2250 m.
361. Gesneriaceae.
362. Ericaceae.
363. Cinchona pubescens. Elev. 2350 m.
364. Cinchona pubescens. Elev. 2400 m.
365. Loasaceae. Elev. 2250 m.
366. Cyperaceae. Elev. 2250 m.
367. Eugenia Jambos. Las Cruces. Elev. 2200 m.
368. Clusia. Along Rio Pabon, near mouth of Quebrada Aguaschiquillas, elev. 2150 m., Mar. 8, 1944.
369. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco, 12 km. south of Urrao, Antioquia, elev. 2040 m.
370. Cinchona pubescens.
371. Rondeletia.

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372. Cinchona pubescens. Finca Canalon, in mountain on right side of Rio Penderisco,
12 km. south of Urrao, Antioquia, elev. 2040 m., Mar. 9.
373.
374. (Mar 10
375. Shrub. Rio Chuscal, north of Urrao, near home of Miguel Angel Navarro, elev. 2500 m.
375a. Cladonia. In trail between home of Miguel Angel N. and paramo, elev. 3000 m.Mar 10
375b.
376. Herb. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. Mar. 10.
377.
378.
379.
380. Espeletia.
381.
382.
383.
384.
385.
386.
387.
388.
389.
390.
391.
392. Espeletia.
393. Carex. Paramo of Morro Frontino, north of Urrao, elev. 11,800 ft. , Mar. 11.
394. Carex.
395. Espeletia.
396. Espeletia.
397. Juncus.
398.
399.
400. Gramineae.
401. Polypodiaceae.
402. Geranium.
403.
404.
405. Ranunculus.
406.
407.
408. Gramineae.
409.
410.
411.
412. Carex.
413.
414.
415. Luzula. In trail ~~xxxx~~ between house of Miguel Angel N. and Paramo of Frontino,
elev. 3200 m., Mar. 11
416. Orchidaceae. Elev. 3200 m.
417. Orchidaceae.
418. Ladenbergia.
419. Cinchona pubescens, elev. 2700 m.
220.
421. Phaseolus.

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422. Cinchona pubescens. Along Rio Urrao about 15 km. northeast of Urrao, elev. 2200 m., Mar. 11.
422a. Shrub in garden, in Urrao-Caicedo camino, March 13.
423. Weinmannia. Quebrada de las Juntas, Urrao-Caicedo camino, elev. 2250 m, Mar. 13.
424. Palicourea.
425. Cinchona pubescens.
426. Western slope of Alto de Urrao, in Urrao-Caicedo camino, elev. 2400 m.
427. Orchidaceae. Edge of camino, western slope of Alto de Urrao, elev. 2580 m.
428. Cinchona pubescens. Elev. 2480 m.
429. Drimys. Elev. 2620 m.
430. Climber. Elev. 2620 m.
431. Shrub. Elev. 2700 m.
432. Ladenbergia. Elev. 2765 m.
433. Ladenbergia. Elev. 2800 m.
434. Cinchona pubescens. Elev. 2820 m.
435. Eastern slope of Alto de Urrao, Urrao-Caicedo camino, elev. 2600 m., Mar. 13.
436. Cinchona pubescens. Near head of Quebrada Noque, in Urrao-Caicedo camino, elev. 2240 m., March 13, 1944.
437. Cinchona pubescens. Alto de Malabrigo, in Caicedo-Anocosca camino, elev. 2340 m., March 14, 1944.
438. Carex. Canon de La Cortada, Caicedo-Anocosca camino, elev. 2200 m.
439. Cinchona pubescens. Alto de Naranjo between Canon de La Cortada and Quebrada Anocosca, Caicedo-Anocosca camino, elev. 2280 m., Mar. 14.
440. Cinchona pubescens. Along Caicedo-Anocosca camino as it descends into Quebrada Anocosca, elev. 2150 m., Mar. 14.
441. Compositae. Elev. 2100 m.
442. Solanum. Quebrada Anocosca above pueblo of Anocosca, elev. 2200 m.
443. Boraginaceae.
444. Quebrada Anocosca, along Anocosca-Abriaqui camino, elev. 2300 m., Mar. 15.
445. Meriania nobilis.
446. Slopes of Morro Pelado, elev. about 2400 m.
447. Myrica.
448.
449. Tree. Elev. 2700 m.
450. Loranthus. Elev. 2800 m.
451. Polypodiaceae.
452. Orchidaceae. Elev. 3190 m.
453. Orchidaceae.
454. Espeletia. Dry paramo at summit of Morro Pelado, elev. 3330 m.
455. Compositae.
456. Fuchsia.
457. Shrub.
458. Shrub.
459. Shrub.
460. Geranium.
461. Shrub.
462. Shrub.
463. Rosaceae.
464. Damp shady place near summit of Morro Pelado, elev. 3300 m., Mar. 15.
465. Dry ridge top along Anocosca-Abriaqui camino, elev. 2900 m.
466. Cinchona pubescens. Along Anocosca-Abriaqui camino near point where camino reaches Rio Herradura, elev. 2380 m.

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467. Cinchona pubescens. Along Rio Herradura 3 mi. north of Abriaqui, elev. 1850 m., Mar. 16, 1944.
468. Palicourea.
469. Cinchona pubescens. Along Rio Herradura 6 mi. north of Abriaqui, elev. 1860 m., Mar. 16, 1944.
470. Cinchona pubescens. Filon Trespeidras, just north of Herradura, Antioquia, elev. 1720 m., Mar. 16, 1944.
471.
472. Shrub. Along Abriaqui-Frontino camino, 3 mi. southeast of Frontino, elev. 1780 m., Mar. 16, 1944.
473. Clusia. Rio Nore, 5 km. from Frontino, Mar. 19, 1944.
474. Cinchona pubescens. Cordillera de Boqueron, along Medellin-Antioquia highway, between Kms. 32 and 33, elev. 2100 m., Mar. 18.
475. Cinchona pubescens. Along Medellin-Antioquia highway, between Kms. 22 and 23, elev. 2320 m., Mar. 18.
476. Tree. Quebrada de Musingita, elev. 1580 m., Mar 27.
477. Gramineae. Elev. 1600 m.
478. Cinchona pubescens. Alto de Musingita, 1780 m., Mar. 27.
479. Tree. Alto de Musingita, elev. 1850 m., Mar. 27.
480.
481. Tree. Alto de Musingita, between Frontino and Quebrada Musingita, 1850 m., Mar. 27.
482. Asclepiadaceae.
483. Eleocharis. "El Bordo", near Frontino, elev. 1500 m.
484. Cyperus.
485. Eleocharis.
486. Cinchona cordifolia. Rio Musinga, elev. 1600 m., Mar. 28.
487. Solanaceae.
488. Equisetum giganteum.
489. Cinchona cordifolia. Elev. 1680 m.
490. Cinchona cordifolia. Elev. 1700 m.
491. Herb. Alto de Portachuelo, head of Rio Musinga, elev. 2100 m., Mar. 28, 1944.
492.
493. Compositae.
494. Palicourea.
495. Cinchona cordifolia. Elev. 1640 m.
496. In camino between Dabeiba and Llano Grande, about 5 km. south of Llano Grande, elev. 1400 m., Mar. 29, 1944.
497. Compositae. On mountain side above Llano Grande, elev. about 2000 m., Mar. 31.
498. Ladenbergia. Elev. 1900 m.
499.
500. Clusia.
501.
502.
503. Bromeliaceae.
504.
505. Cephaelis.
506.
507.
508.
509. Ladenbergia. Elev. 2100 m.
511.
512. Orchidaceae.
513. Phytolacca. Edge of thicket near Llano Grande, elev. about 1600 m., Mar. 31.
514.

515. Along camino within 1 km. south of Llano Grande, elev. m., Mar. 31, 1944. dept. Antioquia.
516.
517. Smilax.
518. Cleome.
519.
520.
521. Ladenbergia.
522. Eleaegia.
523. Cinchona pubescens.
524. Moneima ?
525, Cinchona pubescens. Llano Grande, along trail to Quebrada Chimiado, elev. 1500 m. April 1, 1944. dept. Antioquia.
526. Cinchona pubescems.
527. Camino from Llano Grande to Quebrada Chimiado, elev. 1400 m. Apr. 1.
528. Cinchona pubescens. Elev. 1390 m.
529. Palicourea. Elev. 1300 m.
530. Andropogon. Elev. 1000 m.
531.
532. Tree. Elev. 900 m.
533. "Cafe macho". Along Rio Sucio near Dabeiba, elev. 500 m.
534. Macrocnemum. Below Buenavista, Quebrada Tocumal, north of Urama (San Jose), elev. 1600 m., Apr. 4
535. Shrub. Mouth of Rio del Paramo, elev. 900 m.
536. Cinchona pubescens. Bewteen Buenavista and Alto El Chaquiro, elev. 2100 m., Apr. 5.
537. Ladenbergia. Elev. 2200 m.
538. Cinchona pubescens. Elev. 2250 m.
539. Cinchona pubescens. Elev. 2500 m.
540. In "paramillo", Alto El Chaquiro, camino between Urama and Antesales, elev. 3120 m.
541. Orchidaceae.
542.
543.
544. Espeletia.
545.
546.
547.
548.
549. In forest between Buenavista and Alto El Chaquiro, elev. 2100-2500 m.
550.
551.
552.
553. Cinchona pubescens. Near Buenavista, 1690 m.
554. Cinchona pubescsns. Along camino between Urama and Uramita, elev. 1950 m.y dept. Antioquia. April 6, 1944.
555. Elev. 2000 m.
556. Cinchona pubescsns. Elev. 2100 m.
557. Elev. 2000 m.
558. Elev. 1900 m.
559. Elev. 1720 m.
560. Elev. 1720 m.
561. Cinchona pubescens. Elev. 1720 m.
562. Palicourea.

FOREIGN ECONOMIC ADMINISTRATION

563. Tree. Alto Cadillales, above Quebrada Verruga, elev. 1500 m. Apr. 7. dept. Antioquia.
564. Cinchona pubescens. Alto Cadillales, above Quebrada Verruga, elev. 1850 m., dept. Antioquia. April 8, 1944.
565. Cinchona pubescens. Elev. 1700 m.
566. Elev. 1600 m.
567. Compositae. Elev. 1600 m.
568. Compositae.
569. Along Rio Uramita about 5 mi. above Uramita, dept. Antioquia. Apr. 8.
570. Gesneriaceae. Vicinity of Los Andes, finca of Ismael Lopez, along Rio Blanco, southeast of Guasca, dept. of Cundinamarca, elev. 9300 ft. Apr. 21.
571. Boraginaceae.
572. Rubiaceae.
573. Viola.
574. Polypodiaceae.
575 .Pplygonum.
576. Alchemilla.
577. Compositae.
578.
579. Tropaeolum.
580. Scirpus.
581. Solanum.
582. Rubiaceae.
583. Solanum.
584. Gunnera. Apr. 19.
585. Cruciferae. Apr. 19
586. Apr. 19
587. Apr. 19
588. Uncinia. Apr. 19
589. Gesneriaceae. Apr. 19.
590. Palicourea. Apr. 19.
591. Apr. 19
592. Rubiaceae. Apr. 19.
593. Cinchona officinalis. Apr. 19.
594. Cinchona officinalis. Apr. 19.
595. Cinchona officinalis. Apr. 19.
596. Calceolaria. Apr. 19.
597. Drimys Apr. 19.
598. Carex. Apr. 19.
599. Carex. Apr. 19.
600. Carex. Apr. 19.
601. Cinchona officinalis. Apr. 20.
602. Rubiaceae. Apr. 20.
603. Rubiaceae. Apr. 18.
604. Orchidaceae. Apr. 18.
605. Cinchona officinalis. Apr. 18.
606. Apr. 18.
607. Rubiaceae. Apr. 18.
608. Juncus bufonius ? Apr. 18.
609. Cinchona officinalis. Apr. 18.
610. Cinchona officinalis. Apr. 18.
611. Cinchona pubescens. In Yarumal-Santa Rosa highway about 30 km. north of Santa Rosa, dept. Antioquia, elev. 2560 m., May 2.

FOREIGN ECONOMIC ADMINISTRATION

612. Highway between Yarumal and Valdivia, elev. 2100 m., dept. of Antioquia, May 3, 1944.
613.
614. Same, Alto San Fermin, elev. 2000 m.
614a. Bark sample.
615. Herb.
616. Herb.
617. Shrub.
618. Herb.
619. Cinchona officinalis. Alto Catatumbo, elev. 2300 m.
620. Shrub.
621. Gesneriaceae. Near finca Rio Negro, near headwaters of Quebrada Rosario, elev. 1600 m., dept. Antioquia, May 4, 1944.
622. Rubiaceae.
623. Ladenbergia. Alto El Oso, elev. 2320 m.
624. Compositae.
625.
626. Compositae.
627. Gramineae.
628.
629. Cinchona officinalis. Morro Azul, near Yarumal, along old Yarumal-Valdivia camino, elev. 2500 m., May 4.
630. Cinchona officinalis.
631. Camino between Quebrada Rosario and "Ventanas", elev. 1500-1900 m., May 5.
632.
633. Palicourea.
634.
635. Carretera near Las Ventenas, elev. 1950 m., May 5.
636.
637.
638.
638a. Bark sample.
639. Scleria hirsuta. Along trail near Campomento, elev. 1500 m., May 6.
640. Bidens.
641. Cinchona pubescens. Along trail between Campomento and Anori, on ridge between Quebrada Negra and Rio Nechi, elev. 1350 m., May 7.
642. Scleria secans. Elev. 1300 m.
643. Along trail at Plan de la Rosa, elev. 1480 m.
644. Orchidaceae. Elev. 1400 m.
645.
646. Scleria bracteata. Elev. 1400 m.
647. Compositae. Quebrada Soledad, along Campomento-Anori camino, elev. 980 m.
648. Drosera. Along Campomento-Anori camino near Anori, elev. 1600 m.
649. Elaeagia. In vicinity of Rio Anori, east of the village of Anori, elev. 1550 m., dept. Antioquia, May 8, 1944.
650.
651. Passiflora.
652. Palicourea.
653. Cinchona pubescens. 1660 m.
654. Elev. 1550 m.
655. Cinchona pubescens. Elev. 1640 m.
656. Rubiaceae. Elev. 1550 m.
657. Rubiaceae.
658. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.

FOREIGN ECONOMIC ADMINISTRATION

659. In camino between Anori and Madreseca, along Rio Anori, elev. 1200 m., May 9.
660.
661.
662. Cinchona henleana. In camino between Madreseca and Providencia, along Rio Anori, dept. Antioquia, May 10, 1944, 600-700 m. elev.
663.
664. Cinchona henleana.
665. Lobeliaçeae.
666. Remijia.
667. Remijia. Finca of Gabriel Rendon, Quebrada Tirana, near Rio Anori, 9 km. north of Madreseca, elev. 620 m. May 10.
668. Palicourea.
669. Remijia. 610 m. elev.
670. Remijia. Elev. 640 m.
671. Polypodiaceae. Elev. 640 m.
672. Gesneriaceae. Elev. 610 m.
673. Achras sapota. Elev. 640 m.
674. Elev. 600 m.
675. Bryophyte. Elev. 640 m.
676. Along Anori-Cruces camino, 3 km. north of Anori, elev. 1500 m., May 11.
677. Along Rio Anori about 12 km. north of Anori, elev. 1000 m.
678. Isertáa ? Along Rio Anori between Cruces and Madreseca, elev. 1000 m.
679. Along camino between Cruces and Madreseca, elev. 800 m.
680. Isertia? Along camino at Madreseca, elev. 720 m.
681. Along Cruces-Madreseca camino, elev. 800 m.
682. Isertia? Along Anori-Cruces camino about 10 km north of Anori. Elev. 1000 m.
683. Bark sample.
684. Bark sample.
685. Camino between Anori and Robles, dept. Antioquia, May 12, elev. 1600 m.
686. Heliconia. Elev. 1560 m.
687. Elev. 1680 m.
688. Rubus. Elev. 1780 m.
689. Cuphea. Elev. 1780 m.
690. Sporobolus. Elev. 1780 m.
691.
692. Melastomaceae. Camino between Robles and Guadalupe, elev. 1700 m., May 13
693.
694. Ericaceae.
695.
696. Elev. 1800 m.
697. Cinchona pubescens, elev. 1810 m.
698. Cinchona pubescens. Elev. 1670 m.
699. Elev. 1735.
700. Elev. 1750 m.
701. Ladenbergia. Elev. 1760 m.
702. Rynchospora. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., May 15.
703. Cinchona pubescens. Elev. 2120 m.
704. Rubiaceae.
705. Rubiaceae.
706.
707. Carex.
708. Xyris.

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709. Quebrada Tenche, headwaters of Rio Tenche, elev. 2000 m., dept. Antioquia, Lycopodium, May 15.
710. Orchidaceae. Quebrada at headwaters of Rio Tenche, May 15.
711. Juncus.
712. Cyperus.
713. Gramineae.
714. Cyperaceae.
715. Juncus.
716. Cinchona pubescens. Elev. 2080 m.
717. Moneima.
718. Compositae.
719. Orchidaceae.
720. Tree along Carolina-Tenche camino near El Radio, elev. 1880 m.
721. Cinchona pubescens. Between La Ceja and La Union, dept. Antioquia, elev. 2200 m., May 22, 1944.
722. Along carretera about 1 mi. southeast of La Union.
723. Headwaters of Rio Buey, along carretera.
724. Cinchona officinalis. Along La Union-Sonson carretera, near Rio Aures, at km. 95, elev. 2300 m. May 22.
725. Hepaticae. "Paramo d e Sonson", along or near the carretera between Sonson and Narino, elev. 9000-9600 ft., May 23.
726. Compositae.
727. Hepaticae.
728. Alchemilla.
729.
730.
731. Rubus.
732. Ladenbergia.
733. Orchidaceae.
734. Labiatae.
735.
736.
737.
738. Lycopodium.
739.
740.
741.
742. Carex.
743. Nertera.
744. Alchemilla.
745. Sauraia. Along highway near Narino, elev. 5800 ft., May 24.
746. Hyptis.
747. Fimbristylis.
748. Cyperaceae.
749. Cyperus.
750. Cinchona pubescens. Alonf highway near headwaters of Rio Negrito, elev. 7600 ft., dept. Antioquia, May 24, 1944.
751. Setaria. Slopes of Alto La Paloma, west of Sonson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25.
752.
753.
754.
755. Weinmannia.
756.
757.

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758. Rosaceae. Slopes of Alto La Paloma, west of Sonson, headwaters of Rio Sonson, elev. 8000-8500 ft., May 25, 1944.
759. Fuirena.
760.
761. Rynchospora.
762.
763.
764. Cinchona pubescens. Elev. 8500 ft.
765. Befaria
766. Cinchona pubescens.
767.
768.
769. Ladenbergia. Alto Chambuscado, northwest of Sonson, elev. 9200 ft., May 26.
770. Elev. 8500 ft.
771. Melastomaceae. Alto Capiro, northwest of Sonson, elev. 9200 ft.
772. Cinchona pubescens. Alto Capiro, headwaters of Quebrada Naranjal, elev. 9100 ft.
773. Rubus. Elev. 9100 ft.
774.
775. Viola. Alto Chambuscado, northwest of Sonson, elev. 9700 ft.
776. Viburnum.
777. Cinchona pubescens. Finca Capiro, elev. 9100 ft.
778. Sisyrinchium.
779. Tritoma. Along roadside, Alto Roblelita, southwest of Sonson, elev. 8800 ft.May 27
780. Plantago. Elev. 9700 ft
781. Rubiaceae. Elev. 9800 ft.
782. Phyllanthus. Elev. 9800 ft.
783. Ericaceae. elev. 9800 ft.
784. Rubiaceae. Elev. 9200 ft.
785. Melastomaceae.
786. Cinchona pubescens. Elev. 9200 ft.
787. Cinchona officinalis. Along camino between Sonson and Argelia about 5 km. east of Paramo, elev. 2180 m., May 29. Dept. Antioquia.
788. Cinchona pubescens. Along camino between Sonson and Argelia about 6 km. east of Paramo, elev. 2040 m.
789. Cinchona pubescens. Along camino between Sonson and Argelia at point called Vibora, elev. 1810 m.
790. Galium.
791. Ladenbergia.
792. Palicourea. Along camino between Sonson and Argelia about 3 mi. west of Argelia, elev. 1630 m., dept. Antioquia.
793. Scleria.
794. Gramineae. In camino 1-2 km. west of Argelia, elev. 1580 m., May 30.
795.
796. Boraginaceae.
797. Borreria laevis.
798. Lycopodium.
799. Eleocharis.
800. Panicum.
801. Gramineae.
802. Compositae.
803. Gesneriaceae.
804. Palicourea. In camino between Argelia and Alto del Tigre, elev. 1600 m., May 31.
805. Gramineae.
806. Polypodiaceae.
807.
808. Scleria.
809. Cinchona pubescens. Elev. 1500 m.

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810. Hydrangea. In camino between Argelia and Alto del Tigre, elev. 1620 m., dept. Antioquia, May 31, 1944.
811. Tropaeolum.
812.
813. Becquerelia.
814. Sclefia secans. Along camino between Alto del Tigre and El Socorro, elev. 1710-900 m., June 1, 1944.
815.
816.
817.
818.
819.
820. Palicourea.
821. Selaginella. In camino between El Socorro and Mulato, elev. 900-400 m., June 2.
822. Scleria melaleuca.
823. Selaginella.
824.
825.
826.
827.
828.
829. Remijia. Camino between Mulato and Pecuaria, elev. 340 m., June 3.
830.
831.
832. Remijia.
833.
834.
835. Palicourea. In camino between Pecuaria and San Miguel, elev. 300-200 m.
836. Scleria melaleuca.
837. Eclipta alba. San Miguel, along shores of Rio La Miel. June 4.
838. Tree. Between Pato and San Juan, dept. Antioquia, elev. 350 m., June 20, 1944.
839. Remijia.
840. Cyperus.
841. Scleria.
842. Scleria.
843. Fuirena ? Cruces de Caceres, elev. 570 m., June 22.
844. Fimbristylis ?
845. Cyperaceae.
846. Cyperus.
847. Cyperus.
848. Melastomaceae.
849. Cyperus.
850. Cyperus.
851.
852. Scleria melaleuca.
853.
854.
855. Palicourea.
856. Palicourea.
857. Remijia. East of Cruces, elev. 580 m.
858. Loranthaceae.
859. Remijia.
860. Remijia.

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861. Remijia. West of Cruces de Caceres, elev. 580 m., June 22, 1944.
862.
863. "Goma de perilla".
864. Remijia.
865.
866. Shrub. Between Cruces de Caceres and Quebrada Segovia, June 23.
867. Cyperus. In camino near Dos Bocas, dept. Antioquia, June 24.
868. Scleria. Along highway between Zaragoza and "Clarito"
869. Leguminosae.
870. Scleria melaleuca.
871. Malvaceae.
872. Scleria.
873. Herb. Chapa, near headwaters of Rio Quilcace, elev. 2300 m., dept. Cauca, July 10.
874.
875. Gramineae.
876.
877. Labiatae.
878.
879. Gramineae. Between Paispamba and Chapa, near headwaters of Rio Quilcace.
880
881. Quercus humboldtiana.
882. Carex. Along camino between Chapa and Alto Batanes, elev. 2500 m., July 11.
883. Cinchona pitayensis. Elev. 2640 m.
884. Compositae. Elev. 2850 m.
885. Cinchona pitayensis. Elev. 2640 m.
886. Calceolaria. Elev. 2850 m.
887. Elev. 2850 m.
888.
889. Uncinia.
890. Calceolaria.
891. Labiatae. Alto de Batanes, elev. 2900 m.
892. Polypodiaceae.
893. Carex. Between Chapa and Paispamba, elev. 2200 m., July 12.
894. Gramineae.
895. Befaria.
896. Cuphea.
897. Rubiaceae. Camino between Chapa and Rio Blanco at Quebrada Flautos, elev. 2720 m., dept. Cauca, July 13, 1944.
898. Calceolaria.
899. Rubus. In thicket at timberline, elev. 2800 m.
900. Orchidaceae. Quebrada Flautos, elev. 2720 m.
901. Galium.
902. Melastomaceae. Quebrada Flautos, elev. 2800 m.
903. Paramo de Sotara, elev. 3220 m.
904.
905. Geranium.
906.
907.
908. Luzula. Camino near paramo, elev. 3000 m.
909. Rynchospora. Paramo de Sotara, elev. 3220 m.
910. Above Rio Blanco, elev. 2600 m.
911. Eupatorium. Above Rio Blanco, elev. 2500 m.
912. Bryophyte. Paramo de Sotara. 3220 m.

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913. Galium. Near Rioblanco, elev. 2600 m., July 14, 1944, dept. Cauca.
914. Almus.
915. Cinchona pitayensis. Finca Concordia, elev. 2750 m.
916. Elev. 2880 m.
917.
918. Elev. 2700 m.
919. Cinchona pitayensis. Finca Concordia, 2750 m.
920. "Ortiga". Near Rioblanco, on camino to Quebrada Osoguaico, July 15, 1944.
921. Carex.
922.
923. Melastomaceae. Elev. 2400 m.
924. Palicourea. Elev. 2800 m. Alto La Honda.
925. Boraginaceae. Alto La Honda, elev. 2800 m.
926.
926a.
927. Cinchona pitayensis.
928. Sambucus nigra. Finca Volador. Elev. 2480 m.
929. "Churillo".
930. Vicia. Camino between Rioblanco and Guachicono, July 17.
931.
932. Melastomaceae.
933. Epilobium. Camino between Guachicono and Quebrada Vellones, July 18, elev. 2500 m.
934.
935.
936.
937. Cuphea. Elev. 2900 m.
938. Orchidaceae.
939. Melastomaceae. Cordillera Vellones, elev. 3100 m.
940. Quebrada Vellones, elev. 2800 m.
941.
942.
943.
944.
945.
946.
947.
948. Cruciferae.
949.
950. Cinchona pitayensis. Head of Rio Putis, elev. 2820 m.
951. Bomarea. Elev. 2800 m.
952. Cyperaceae. Cordillera Vellones, elev. 3100 m.
953. Rio Putis, elev. 2900 m.
954.
955. Camino between Guachicono and Cordillera Vellones, elev. 2800 m.
956. Orchidaceae. headwaters of Rio Putis, elev. 2900 m.
957.
958.
959. Rio Putis headwaters, elev. 2800 m.
960.
961. Elev. 2900 m.
962.
963. Viola. Head of Rio Putis, elev. 2900 m.
964. Labiatae. Along camino near Guachicono, elev. 2700 m.

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965. Paramo de las Barbillas, south of Guachicono, dept. Cauca, elev. 3100 m., July 19, 1944.
966.
967.
968.
969.
970. Lupinus.
971. Rynchospora.
972.
973. Bomarea.
974.
975.
976. Espeletia.
977.
978. Castilleja.
979.
980.
981. Carex.
982.
983.
984. Iridaceae.
985. Juncus.
986. Ranunculus.
987. Hypericum.
988.
989. Headwaters of Rio Caqueta, elv. 2900 m., July 19.
990.
991. Between Guachicono and Paramo de las Barbillas, elev. 2900 m., July 19.
992. Datura.
993. Compositae. Wet sabana of frailejones in Valle de las Papas near Valencia, elev. 2700 m., July 20, 1944.
994. Plantago.
995. Compositae.
996.
997.
998. Rubus.
999. Xyris.
1000. Juncus.
1001. Cladonia.
1002. Lobelia.
1003. Cyperaceae.
1004. Juncus.
1005. Lycopodium.
1006. Musci. Growing on thatched roof of house in Valle de las Papas, elv. 2700 m.
1007. Lobelia. Valle de las Papas, dept. Cauca, elev. 2700 m., July 21, 1944.
1008.
1009.
1010. Solanum.
1011. Solanum.
1012. Rubus.
1013. Shrub. Along camino between Valencia and San Sebastian, east slope of mountain, elev. 2700-3000 m., July 21.

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1014. Boraginaceae. Along camino between Valencia and San Sebastian, east slope of B mountain, elev. 2700-3000 m., July 21, 1944.
1015. Galinsoga ?
1016.
1017. Gramineae.
1018. Same locality, but west side of mountain, elev. 2500-3000 m.
1019.
1020.
1021. Gramineae. On dry roadbanks near San Sebastian, elev. 2200 m., July 21.
1022. Musci.
1023. Ladenbergia. Along Rio Grande, camino between San Sebastian and San Andres, elev. 2500 m., July 23, 1944.
1024. Cinchona officinalis. Along Rio Grande near San Andres, elev. 2200 m., July 24.
1025. Ladenbergia (Cinchona henleana). Along trail, San Andres to Santa Rosa, near Rio Grande, elev. 2150 m.
1026. Cinchona pubescens. Between Quebrada Curuyaco and Santa Rosa, along Rio Caqueta, elev. 1840-1700 m., July 24.
1027. Psychotria ?
1028.
1029. Sanicula.
1030. Galium.
1031. Caryophyllaceae.
1032.
1033.
1034. Rynchospora.
1035. Rynchospora.
1036. Orchidaceae.
1037.
1038.
1039.
1040.
1041. Cinchona officinalis. La Vieja, overlooking Santa Rosa, July 25, 1944.
1042. Cinchona officinalis (tuna).
1043. Cinchona officinalis ("roja"). Elev. 2100 m.
1044. Cinchona officinalis ("roja"). Elev. 1900 m.
1045. Cinchona officinalis ("roja"). Elev. 1900 m.
1046. "Quassia".
1047. Cinchona officinalis. Bark sample.
1048. Cinchona officinalis. Bark sample.
1049. Cinchona pubescens. Along Rio Caqueta, camino between Carmelo and Rio Curuyaco, elev. 1800 m., July 26, 1944.
1050. Cinchona pubescens. Along Rio Caqueta, camino between Santa Rosa and Carmelo, elev. 1720 m.
1051. "Barbasco". Santa Rosa, elev. 1700 m.
1052. Near Carmelo, elev. 1800 m.
1053. Cleome. Roadside near Santa Rosa, elev. 1800 m.
1054. Cinchona pubescens. Camino between Rio Curuyaco and Rio Grande, elev. 2200 m.
1055. Solanum. Along or near Rio Grande, camino between San Andres and Alto Todos Santos, elev. 2400-2700 m., July 27, 1944.
1056. Rynchospora.
1057. Carex.
1058.
1059. Eleocharis.
1060.

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1061. Between Alto Todos Santos and San Sebastian, elev. 2300 m., July 27.

1062.
1063. Lichen.
1064. Lcopodium. Along or near Rio Grande, camino between San Andres and Alto Todos Santos, elev. 2400-2700 m., July 27.
1065. San Sebastian, dept. Cauca, July 28, 1944.
1066. Eresine celosia.
1067.
1068. Phytolacca.
1069. Rosaceae.
1070. Camino between San Sebastian and Bolivar, near Rio Negro, elev. 1600 m., July 29, 1944.
1071. Macrocnemum. Elev.2000 m.
1072. Tree. Along Rio San Jorge, near San Sebastian, elev. 1500 m.
1073. Camino near Rio Negro, elev. 1500 m.
1074. Malpighiaceae ? Along camino, north slope of Cerro Gordo, elev. 1700 m.
1075. Cosmibueha. Quebrada Ortega, west of Cajibio, elev. 1520 m., August 24, 1944.
1076. Cosmibuena.
1077. Camino near Ortega, elev. 1800 m.
1078.
1079.
1080.
1081. La Laguna, elev. 1800 m.
1082. Scleria bracteata. Rio Cauca at Dinde, elev. 1260 m.
1083. Finca La Cumbre, Cordillera Occidental, head of Quebrada La Florida, headwaters of Rio Dinde, elev. 2700 m., August 25.
1084. Polygonaceae.
1085. Rubus.
1086. Palicourea.
1086a.
1087. Viburnum.
1088. Solanaceae.
1089. North slopes of La Cumbre, Pico de Aguila, Rio Agau Clara drainage, elev. 2700 m., August 26.
1090.
1090a. Gnaphalium. (south slopes)
1090b. Moss. (south slopes)
1091. Cinchona pitayensis.
1092.
1093.
1094. "Pino colombiano".
1095. Caryophyllaceae.
1096. Bryophyte.
1097.
1098. Ladenbergia.
1099. Cinchona pitayensis.
1100. Balanophoraceae.
1101. Quebrada Los Andes, La Cumbre, near finca of Zoilo Campo, west of Pico de Aguila, elev. 2750 m., August 27.
1102. Cinchona pitayensis. Elev. 2750 m.
1103.
1104. Lycopodium.
1105.
1106.
1107.

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1108. Between La Cumbre and Quebrada La Isla, headwaters of Rio Dinde, elev., 2700 m., August 28, 1944.
1109. Elev. 2600 m.
1110.
1111. Solanum.
1112. Elev. 2500 m.
1113. Viola.
1114. Viola. Elev. 2400 m.
1115.
1116. "Molasses grass".
1117.
1118. Carex. Elev. 2000 m. At Quebrada Obscuridad.
1119. Elev. 2300 m.
1120. Elev. 2000 m.
1121. Rynchospora. Elev. 2000 m. Quebrada Obscuridad.
1122. Euphorbiaceae. Elev. 2200 m.
1123. Elev. 2000 m. Between Quebradas Obscuridad and La Isla.
1124.
1125.
1126.
1127. Cinchona pubescens.
1128. Ladenbergia. Quebrada Ortega, elev. 1700 m., August 29.
1129. Elev. 1650 m.
1130. Elev. 1600 m.
1131.
1132. Gramineae. Elev. 1500 m.
1133. Lycopodium. Rim of canyon of Rio Cauca east of Dinde, elev. 1550 m.
1134. Ladenbergia. Between Quebrada Ortega and La Laguna, elev. 1780 m.
1135. Quebrada Ortega, elev. 1500 m.
1136.
1137.
1138.
1139.
1140. Quercus humboldtiana. Quebrada La Isla, elev. 2000 m.
1141. Between Quebrada La Isla and Quebrada Ortega, elev. 1700 m.
1142. Quebrada Ortega, elev. 1500 m.
1143. Ladenbergia. Quebrada Ortega, elev. 1700 m.
1144.
1145.
1146.
1147. "Lava platos". Patia Valley near Patia, September 7, 1944. Dept. Cauca. Elev. 640 m.
1148. Elev. 600 m.
1149. Canavalia. Rio Capitanes, elev. 1000 m.
1150. Phaseolus. Rio Capitanes. Elev. 800 m.
1151. "Buenas tardes". Compositae. Trail near Patia, elev. 625 m.
1152. Scleria bracteata. Bewteen Olaya and San Alfonso, Rio Capitanes, elev. 1000 m.
1153. Cassia. Rio Patia. Elev. 600 m.
1154. Ladenbergia. Between Olaya and San Alfonso, Rio Capitanes, elev. 1250 m.
1155. Lobeliaceae. San Alfonso, elev. 1800-2000 m.
1156. Piperaceae.
1157. Compositae.
1158. Moneima.
1159. Rubiaceae.
1160. Piperaceae.
1161. Lobeliaceae.
1162. Psychotria ?
1163. Lobeliaceae.

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1164. "Cardo santo". San Alfonso, elev. 1800-2000 m. Sept. 8, 1944. Dept. Cauca.
1165. Compositae.
1166. Asclepiadaceae.
1167. Uncinia.
1168. Gnaphalium.
1169. Crotalaria.
1170. Melastomaceae.
1171. Eupatorium.
1172. Rubiaceae.
1173. Rubiaceae.
1174. Psychotria ?
1175. Cerastium ?
1176. Bocconia frutescens.
1177. Palmae.
1178.
1179. Psychotria ?
1180.
1181.
1182. Psychotria.
1183. Apocynaceae.
1184. Solanum galeatum. ("Tomate de arbol").
1185.
1186. Rubiaceae.
1187. Hedyosmum granizo.
1188. Solanum. "Guinda".
1189. Anona.
1190. Eugenia.
1191. "Aguacatillo".
1192. "Totocal".
1193. Cerro San Pedro and its slopes, elev. 2880 m., Sept. 10.
1194. Isertia. Elev. 2750 m.
1195. Rubiaceae. Elev. 2520 m.
1196. Cinchona pitayensis. North of Cerro San Pedro, elev. 2750 m.
1197. Lobeliaceae. Elev. 2540 m. South slopes.
1198.
1199. Valerianaceae. Near camp, elev. 2500 m.
1200. South slopes.
1201. North slopes. elev. 2750 m.
1202. Cinchona pitayensis. South slopes, elev. 2540 m.
1203. Berberis. 2600 m.
1204. Palicourea. Northwest slopes, elev. 2730 m.
1205. "Pasto Micay". North slopes, elev. 2800 m.
1206.
1207. Elev. 2700 m.
1208.
1209. Elev. 2800 m.
1210. Elev. 2750 m.
1211. Elev. 2700 m.
1212.
1213. Cinchona pitayensis.
1214. Cinchona pitayensis.
1215. Rubiaceae.
1216. Cinchona pitayensis. North slopes, elev. 2750 m.

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1217. Moss. Cerro San Pedro and its slopes, west of El Bordo, dept. Cauca, elev. 2660 m., September 10, 1944.
1218. Weinmannia. Elev. 2880 m.
1219. Drimys granatensis. Elev. 2880 m.
1220. Rynchospora.
1221a. "Yolombo".
1221. Camp Cerro San Pedro, elev. 2520 m., September 11.
1222. Between Cerro San Pedro and San Alfonso, on top of cordillera, elev. 2500-2700 m.
1223. Lobeliaceae. Sept. 11.
1224. Cinchona. Elev. 2480 m.
1225. Elev. 2500-2700 m.
1226. "Yolombo".
1227. Hypericum laricifolium.
1228. Freziera chrysophylla. "Motilon".
1229. Freziera chrysophylla.
1230. "Guazguin".
1231. Gramineae.
1232. Lobeliaceae.
1233. "Amarillo pena".
1234.
1235. Rubiaceae. Along Quebrada Puente de Tierra above Argelia, dept. Cauca, elev. 1800 m., September 13, 1944.
1236. Solanum.
1237. Elev. 1300 m.
1238. Condaminea corymbosa. Elev. 1600 m.
1239.
1240. Solanaceae.
1241. "Jigua".
1242. "Jigua".
1243. "Guayacan".
1244. Anona. Elev. 2000 m.
1245. Headwaters of Rio Turbio, elev. 2200 m., Sept. 13.
1246. Near Puente de Tierra, elev. 2200 m. Sept. 13.
1247. Solanaceae. Quebrada Puente de Tierra, elev. 2100 m., Sept. 13.
1248. Elev. 2200 m. Near Puente de Tierra.
1249.
1250. Quebrada Puente de Tierra, 2100 m., Sept. 13.
1251. At Argelia, elev. 1220 m., Sept. 14.
1252. Rubiaceae. Along Rio San Juan above Argelia, elev. 1500 m.
1253. Headwaters of Rio San Juan, slopes of Cerro Bello, elev. 1700 m.
1254. Along Rio San Juan above Argelia, elev. 1400 m.
1255. Cosmibuena. Quebrada de la Laguna, elev. 1700 m.
1256.
1257. Rubiaceae. Quebrada de la Laguna, elev. 2000 m., Sept. 15.
1258. Quebrada de la Laguna, elev. 1800 m.
1259.
1260. Quebrada de la Laguna, elev. 1650 m.
1261. Elev. 1800 m.
1262. Elaeagia. Elev. 1650 m.
1263.
1264. "Hoja santa". Quebrada de la Laguna, elev. 2000 m.
1265. Cinchona pitayensis. West slopes of Cerro Bello, headwaters of Rio Guaitara, elev. 2700 m., Sept. 16, 1944.

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1266. Summit of peak near Cerro Bello, elev. 3020 m., Sept. 16.
1267.
1268.
1269. Compositae.
1270. Hypericum.
1271. Headwaters of Quebrada de la Laguna, elev. 2500 m.
1272. Gramineae. Slopes of Cerro Bello, elev. 2800 m.
1273. Weinmannia. Summit of peak near Cerro Bello, elev. 3020 m.
1274. Rosaceae.
1275. Compositae.
1276. Bomarea. Near summit of Cerro Bello, elev. 29 00 m.
1277. Gramineae.
1278. Gramineae.
1279. Gramineae.
1280. Rubiaceae. Elev. 2500 m.
1281. Rubiaceae. Elev. 3020 m.
1282. Camp Cerro Bell, elev. 2120 m.
1283. Cinchona pubescens. Headwaters of Rio Guaitara near La Depresion, elev. 2400 m., dept. Cauca., September 17, 1944.
1284. Melastomaceae.
1285.
1286. Bromeliaceae. Elev. 2500 m.
1287. Headwaters of Quebrada de la Laguna, elev. 2120 m.
1288. Elev. 2200 m.
1289. "Cedro". Elev. 2360 m.
1290. Palicourea. Head of Rio Guaitara, elev. 2250 m., Sept. 18.
1291. Araceae. Elev. 2000 m.
1292.
1293. Rubiaceae. Elev. 2250 m.
1294. Araliaceae. Elev. 2000 m.
1295. Araliaceae. Elev. 1620 m.
1296. Rubiaceae. Elev. 2000 m.
1297. Rubiaceae. Elev. 2310 m.
1298. Cinchona pubescens. Elev. 2310 m.
1299. Heliconia. Elev. 1620 m.
1300. Rubiaceae.
1301. Sept. 19.
1302. Ladenbergia. Elev. 1560 m., along Rio Guaitara.
1303. Macrocnemum.
1304. Joosia.
1305. Macrocnemum. Along Rio Guaitara, elev. 1550 m.
1306.
1307. Condaminea.
1308. Elev. 1560.
1309. Elev. 1500 m.
1310. Rubiaceae. Elev. 1560 m.
1311. "Jigua". Elev. 1500 m.
1312. Orchidaceae.
1313. Hepaticae.
1314. Joosia. Elev. 1550 m.
1315. Elev. 1350 m.
1316. Asclepiadaceae. Elev. 1480 m.
1317. Polypodiaceae. Elev. 1550 m.
1318. "Morichillo". Elev. 1500 m.

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1319. Melastomaceae. Along footpath between Rio San Juan (at Quebrada Las Naranjas) and Quebrada Agua Clara, dept. Cauca, elev. 1500 m., Sept. 21.
1320a.
1320b.
1321. Monotropa. Elev. 1600 m.
1322.
1323. Solanum. Along Rio Pinche,elev. 1480 m., September 23, 1944.
1324. Headwaters of Rio Pinche, elev. 1870 m.
1325. Headwteras of Rio Timbiqui, at bas eof Cerro Pinche, elev. 1890 m., Sept. 24.
1326. La Depresion at base of Cerro Pinche, elev. 1800 m.
1327. Rubiaceae.
1328. Rubiaceae.
1329. Elev. 2000 m., September 25, 1944.
1330.
1331.
1332.
1333.
1334.
1335.
1336.
1337.
1338.
1339.
1340.
1341.
1342. Loranthaceae.
1342. "Chusquea."
1344. Orchidaceae.
1345. Fern.
1346.
1347.
1348.
1349. Orchidaceae.
1350. (No collection).
1351. Orchidaceae.
1352. Orchidaceae.
1353. Towards south end of La Depresion between Cerro Pinche and Cerro Plateado complex, elev. 1980-2440 m., Sept. 26.
1354.
1355.
1356.
1357.
1358.
1359.
1360. Cinchona pubescens. Elev. 1960 m.
1360a. Cinchona pubescens.
1361. Polytrichum.
1362. Moss.
1363. Moss.
1364. Bomarea,
1365. Fern.
1366. Rubiaceae. Elev. 1960 m.

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1367. Along Rio Pinche near headwaters, elev. 1960 m., Sept. 27, 1944.
1368. Bromeliaceae. Elev. 1740 m.
1369. Polypodium. Elev. 1330 m.
1370. Cladium ? Elev. 1330 m.
1371. Mapania ? Elev. 1300 m.
1372. Gesneriaceae. Elev. 1300 m.
1373.
1374.
1375.
1376. Along Rio Pinche near camp Chontaduro, elev. 1030 m., Sept. 28.
1377. Along Quebrada Aguaclara near its junction with Rio Plateado, elev. 1100 m.
1378.
1379. Lycopodium. Collected on slopes of Cerro Plateado, elev. 2600-3000 m., by Carlos Hutter and Rafael Hurtado, Sept. 20-29.
1380. Iridaceae.
1381. Cinchona pubescens.
1382. Ericaceae.
1383.
1384.
1385. Gesneriaceae.
1386. Cladonia.
1387.
1388. Rubiaceae.
1388a. Rubiaceae.
1389. Orchidaceae.
1390. Orchidaceae.
1391. Loranthaceae.
1392. Balanophoraceae. Collected by Hutter and Hurtado, Rio Guaitara, elev. 1600 m.
1392a. Cinchona pitayensis. Cerro Plateado, Hutter and Hurtado.
1392b. Rubiaceae. Hutter and Hurtado.
1393. Cinchona pitayensis.
1393a. Cinchona pitayensis.
1394. Araceae.
1395. Rynchospora.
1396.
1397. "Jigua".
1398.
1399. Vitis.
1400.
1401. Rio Guaitara, elev. 1350 m. Hutter and Hurtado.
1402. Rubiaceae. Along Rio San Juan near Argelia, collected by J.S.Granger, elev. 1200, Sept. 29, 1944.
1403. (From this point forward collections are by Earl L. Core) Near Las Naranjas, elev. 1700 m., Sept. 28.
1404.
1405. "Canime". Near Las Naranjas, elev. 1500 m., Sept. 29.
1406. Rubiaceae.
1407. Scleria melaleuca. Along Rio San Juan below Argelia, elev. 900 m.
1408. "Jigua". Along Rio San Juan below Argelia, elev. 1200 m., Sept. 30.
1409. Stachytarpheta.
1410. Macrocnemum.
1411. Cosmibuena.
1412.
1413. Cyperus.
1414.
1415. Asclepias curassavica.
1416. Condaminea corymbosa.

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1417. Cinchona pubescens. Near Leiva.
1418. Cinchona.
1419. "Barbasco". Bejuco.
1420. Bomarea. Quebrada Puente de Tierra, elev. 1800 m., October 1, 1944.
1421. Peperomia, Elev. 1900 m.
1422. Carex. Elev. 1700 m.
1423. 1423a. Cosmibuena.
1424. Scleria. Rio Capitanes near San Alfonso, elev. 1420 m., Oct. 3.
1425. Along camino near San Alfonso, dept. Cauca, elev. 1800 m.
1426. Melastomaceae. Quebrada Las Tayas, elev. 1100 m., Oct. 3.
1427. Cinchona pubescens. Quebrada Las Tayas, elev. 1320 m.
1428. Scleria bracteata. Rio Capitanes, elev. 1450 m.
1429. Clitoria. Quebrada Las Tayas, elev. 1000 m.
1430. Guazuma ulmifolia. Rio Patia near El Bordo, elev. 700 m.
1431. Cinchona pitayensis. Bark sample.
1432. Compositae. Moscopan.
1433. Compositae.
1434. Gnaphalium.
1435. Paramo of Purace, elev. 3000 m., Oct. 11, 1944.
1436.
1437. "Romero".
1438.
1439.
1440. "Arnica".
1441. Bomarea.
1442. Bromeliaceae.
1443. Compositae.
1444. Carex.
1445. Carex.
1446. Gramineae.
1447. Cyperaceae.
1448. Compositae.
1449. Compositae.
1450.
1451. Geranium.
1452. Cladonia.
1453.
1454. Carex. Hot sulfur baths.
1455. Ericaceae. Hot sulfur baths.
1456. Collected by Rafael Hurtado in the Moscopan region, dept. Cauca, Oct. 7-11.
1457.
1458. Cinchona pubescens.
1459. Ericaceae.
1460.
1461.
1462. Cinchona officinalis.
1462a.
1463.
1464.
1465. Rubiaceae.
1466. Rubiaceae.
1467. Espeletia. Elev. 2120 m.
1468. Orchidaceae. (End of collection of Rafael Hurtado).

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1469. Rubiaceae. Queremal, Valle del Cauca dept., elev. 1380-1500 m., Oct. 28, 1944.
1470. Chusquea.
1471. Lobeliaceae.
1472. Orchidaceae.
1473. Shrub.
1474. Zingiberaceae.
1475. Gesneriaceae.
1476. Rubiaceae.
1477. Apocynaceae.
1478. Epiphyte.
1479. Orchidaceae.
1480. Lobeliaceae.
1481. Epiphyte.
1482. Herb.
1483. Mikania ?
1484. Gesneriaceae.
1485. Cucurbitaceae.
1486. Shrub. Dense forest above Finca Tokio, near Queremal, Oct. 29, 1800-1990 m.
1487.
1488.
1489.
1490. Cyclanthaceae.
1491. Cinchona pubescens.
1492. Bromeliaceae.
1493.
1494. Orchidaceae.
1495.
1496.
1497.
1498.
1499.
1500. Begonia.
1501. "Nacedera". Head of Rio San Juan, near Queremal, elev. 1500 m., Oct. 29.
1502. Acalypha.
1503. "Jigua".
1504. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, Valle del Cauca dept., November 6, 1944.
1505. Orchidaceae.
1506. Rubiaceae.
1506.
1507. Utricularia.
1508.
1509. Cyperus.
1510.
1511. Halenia ?
1512. Xyris.
1513. Cyperaceae.
1514. Gramineae.
1515.
1516. Solanaceae.
1517.
1518. Fern.
1519.
1520. Scleria melaleuca.

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1521. Along Carretera al Mar, near Rio Dagua, 10-15 kms. from Buenaventura, dept. Valle del Cauca, November 6, 1944.
1522.
1523.
1524. Polygala.
1525. Ploygala micrantha ?
1526.
1527. Malvaceae.
1528.
1529. Solanaceae.
1530. Cyperus.
1531.
1532.
1533.
1534.
1535. Lantana.
1536.
1537. Cyperus.
1538.
1539.
1540.
1541. Trail from Cordoba to Quebrada La Brea, dept. Valle del Cauca, elev. 50-100 m., November 7, 1944.
1542.
1543. Gesneriaceae.
1544. Gesneriaceae.
1545.
1546. Cinchona barbacoensis.
1547.
1548. Cinchona barbacoensis.
1549. Compositae.
1550.
1551. Cyperaceae.
1552.
1553. Gesneriaceae.
1554. Cinchona barbacoensis.
1555. Cinchona barbacoensis.
1556. Cinchona barbacoensis.
1557.
1558.
1559.
1560.
1561.
1562. "Corazon herida". In flower garden at Cordoba, November 7.
1563. Hibiscus.
1564. "Flor de diablo".
1656. Locality same as 1541.
1566. Fern. In flower garden at Cordoba.
1567. Along coast of Pacific Ocean at mouth of Buenaventura Bay, Nov. 8.
1568. Rhizophora.
1569.
1570. Apocynaceae.
1571.

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1572. Along railway at Dagua, Valle del Cauca dept., Nov. 9.
1573. Labiatae.
1574. Quebrada Santa Barbara near Florida, Valle del Cauca dept., Nov. 15, elev. 1500 m.
1575.
1576. Pluchea.
1577.
1578. Elev. 1700 m.
1579. Elev. 2200 m.
1580. Cavendishia. Elev. 2600 m.
1581. Cladonia. Elev. 2100 m.
1582. Bocconia. Elev. 2600 m.
1583. Cavendishia. Elev. 2700 m.
1584. Bocconia.
1585.
1586. Ladenbergia. Elev. 2800 m.
1587. Compositae. At top of cordillera central, 3600 m., Florida-Herrera camino, just within dept. of Tolima, Nov. 16.
1588. Gentianaceae.
1589.
1590. Luzula.
1591. Carex.
1592. Rubiaceae. Rio Hereje, near Auxilio, dept. Tolima, Nov. 17, elev. 2500 m.
1593.
1594. ?
1595. ?
1596. Cinchona pubescens. Rio Saldana, dept. Tolima, elev. 1600-1800 m., Nov. 19.
1597. Rubiaceae.
1598. Lobeliaceae.
1599.
1600. Fern.
1601. Lobeliaceae.
1602. Gesneriaceae.
1603. Rubiaceae.
1604. Lobeliaceae.
1605. Lobeliaceae.
1606. Lobeliaceae.
1607. Lobeliaceae.
1608. Moneima.
1609. Gesneriaceae.
1610. Lobeliaceae.
1611. Lobeliaceae.
1612. Gymnospermae.
1613.
1614. Rubiaceae.
1615.
1616. Thalictrum. Rio Hereje, dept. Tolima, near Albania, elv. 2470 m., Nov. 20.
1617. Elev. 2400 m.
1618. Rubiaceae.
1619. Elev. 2000 m.
1620. Loasaceae.

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1621. Paramo between Auxilio and top of cordillera, elev. 11000 ft., dept. Tolima, November 21, 1944.
1622.
1623.
1624. Compositae. Along Rio Hereje above Auxilio, elev. 2800 m.
1625. Galium. Along Rio Hereje near Auxilio, elev. 2700 m.
1626. Sisyrinchium. Between Auxilio and top of cordillera, in paramo, elev. 11000 ft.
1627. Compositae.
1628.
1629. ?
1630.
1631. In paramo, elev. 10,000 ft.
1632.
1633.
1634. Ribes. Along Rio Hereje above Auxilio, elev. 9000 ft.
1635. Gesneriaceae.
1636. Paramo at head of Quebrada Santa Barbara, above Abelina, in dept. Valle del Cauca, Nov. 21, elev. 11000 ft.
1637. Espeletia. Elev. 11,000 ft.
1638. Elev. 10,000 ft.
1639.
1640. Arnica.
1641. Elev. 11,000 ft.
1642. Near Abelina, elev. 10,000 ft.
1643. In paramo above Abelina, elev. 11,000 ft.
1644.
1645.
1646.
1647. In paramo at head of Rio Hereje, in Tolima, elev. 11,000 ft.
1648. Puya.
1649. El Pedregal, near Florida, elev. 1200 m., dept. Valle, Nov. 22.
1650. Solanum. Along Quebrada Santa Barbara, east of Florida, elev. 1650 m.
1651. Berberis. In paramo near Abelina, elev. 10,000 ft.
1652.
1653. Luffa. Cali, Dec. 9. This and the following collected by Rafael Hurtado.
1654. Labiatae. Near Barragan, elev. 2825 m.
1655.
1656. Rio Tulua, elev. 1500 m.
1657. Rio Loro, head of Rio Tulua, 2800 m.
1658.
1659. Cinchona pubescens. Rio Loro, head of Rio Tulua, elev. 3000 m.
1660. Rio Tulua, elev. 1500 m.
1661. Asclepiadaceae. Sevilla, elev. 1520 m.
1662. Datura. Sevilla, Rio Bugalagrande, elev. 1520 m.
1663. Typha. Rio Loro, elev. 2800 m.
1664. Sevilla, elev. 1520 m.
1665. Rio Bugalagrande, elev. 1550 m.
1666. Sevilla, elev. 1530 m.
1667. Sevilla, elev. 1530 m.

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1668. Labiatae. Along Rio Guengue, near Corinto, dept. of Cauca, elev. 1460 m., Dec. 1-7, 1944. This and the following collected by Carlos Hutter.
1669. Labiatae. Elev. 1500 m.
1670. Caryophyllaceae. Elev. 1600 m.
1671. Leguminosae. Elev. 1560 m.
1672. Elev. 1650 m.
1673.
1674.
1675. Nicotiana. Elev. 2100 m.
1676. Elev. 1650 m.
1677. Cinchona pubescens. Elev. 2320 m.
1678. Cinchona pubescens. Elev. 2360 m.

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COLOMBIA CINCHONA MISSION DATA

Collector: Earl L. Core

PLANT COLLECTIONS MADE BY EARL L. CORE IN THE REPUBLIC OF COLOMBIA DURING THE PROGRESS OF EXPLORATIONS FOR CINCHONA

1. Ericaceae — In pass, Cordillera Oriental, along highway from Bogota to Villavicencio, elev. about 10,000 ft., dept. Cundinamarca, Nov. 7, 1943
2. Rosaceae
3. Espeletia
4. Hedyotis
5. Pipalanthus
6. Lupinus
7. Eupatorium
8. Oxalis
9. Valerianella
10. Gramineae
11. Rubiaceae
12. Cyperaceae
13. Luzula
14. Rubiaceae
15. Rubiaceae
16. Pipalanthus
17. Orchidaceae
18. Ericaceae
19. Hypericum
20. Melastomaceae
21. Lycopodium
22. bamboo
23. Gramineae
24. Gramineae
25. Senecio, probably abietinum
26. Halenia
27. Gramineae
28. Sisyrinchium
29. Gentiana
30. Geranium
31. Blechnum arboreum
32. Castilleja
33. Befaria
34. Gaultheria
35. Ericaceae
36. Madia
37. Gnaphalium
38. Compositae
39. Ericaceaea
40. Gnaphalium
41. Compositae
42. Bartsia
43. Compositae, Aster or near relative
44. --- Silvia, along Rio Piendamo, elev. about 2500 m. dept. Cauca, Nov. 14, 1943
45. Rubus
46. Viola
47. Cinchona pitayensis

FOREIGN ECONOMIC ADMINISTRATION

48. Cinchona pitayensis. In plantation of Miguel Cáàmbas, Pitayo, elev. 2800 m., November 17, 1943
49. Tree , summit of pass on trail between Silvia and Pitayo, elev. 3000 m., November 17, 1943
50. Hypericum
51. Tree
52. Shrub
53. Shrub
54. Bomarea
55. Gnaphalium
56. Orchidaceae
57. Shrub
58. Melastomaceae
59. Semi-shrubby
60. Palicourea, west slope, on Hacienda Agoyan, about 12 km. east of Silvia, near paramo de las Letras, elev. 2980 m., in forest. Nov. 18, 1943
61. Cinchona pitayensis
62. Rubiaceae
63. Solanum, same locality as above, but pasture land, elev. 2800 m., Nov. 18, 1943
64. Melastomaceae
65. Melastomaceae
66. Tree with red flowers, Hacienda Ambochico, near Silvia, elev. about 2700 m., Nov. 18, 1943
67. Melastomaceae (Blakea?). In forest along Piendamo-Silvia highway, between Kms. 12 and 13, elev. 2460 m., Nov. 19, 1943
68. Cinchona pubescens
69. Tree
70. Cinchona pubescens. In open field along Piendamo-Silvia highway, between Kms. 15 and 16, elev. 2500 m., Nov. 19, 1943
71. Cinchona pubescens. Along trail, San Miguel to La Vega, 1 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
72. Tree
73. Eleocharis. Along highway at Dolores (Rosas), dept. Cauca, Nov. 24, 1943
74. Rynchospora
75. Cinchona pubescens. Along trail, San Miguel to La Vega, east-facing slope, 5 km. south of San Miguel, in wooded ravine, elev. 1700 m., Nov. 26, 1943
76. Cinchona pubescens. Along trail, San Miguel to La Vega, at summit of mountain, place called Campomento, on land of Gustavo Molano, elev. 2000 m. Nov. 26
77. Herb. Near La Vega, elev. about 7500 ft., Nov. 27, 1943, dept. Cauca
78. Shrub
79. Climber
80. Very common
81. Shrub,"fiambre"
82. Climber
83. On rocks
84. Shrub, "totocal"

FOREIGN ECONOMIC ADMINISTRATION

FOREIGN ECONOMIC ADMINISTRATION

85. Gramineae. Mountain slopes near La Vega, Cauca, alt. about 7500 ft., Nov. 28,1943
86. Shrub
87. Salvia
88. Quercus Humboldtiana
89. Weed
90. Shrub
91. Scrambler
92. Vine
93. Gramineae
94. "Pispura"
95. Cuphea
96. Fern
97. Polygonaceae
98. Polygala
99. "Clabillo"
100. "Cerote"
101. Polygonum
102. Liliaceae
103. Oxalis
104. Orchidaceae. Summit of mountain on trail between La Vega and Caquiona, elev. 3000 m., Nov. 29, 1943 - dept. Cauca
105. Melastomaceae. Near Caquiona, dept. Cauca, Nov. 29, 1943
106. Clusia.
107. Rubus
108. Alnus ferrugineus
109. Viola
110. Viola
111. Scrambler
112. Rutaceae. "arrayan amargo". Along trail just west of San Sebastian, Nov. 30, 1943
113. Orchidaceae. Along trail between San Sebastian and Rosal, Nov. 30, 1943
114. Dodonaea viscosa. Sapindaceae. "Chamano".
115. "Cajon de chucha". Along ridge between Rio Ramos and Quebrada Meneses, 6 km. east of Rosal, dept. Cauca., Nov. 30, 1943
116.
117. Rubiaceae
118. Compositae
119. Shrub
120. Manihot esculenta. Along trail between Rosal and Bolivar, Dec. 1, 1943
121. Coffee
122. Herb
123. Leguminosae. Calliandra
124. Gramineae. Lasciacis
125.
126. Vine
127. "Totocal"
128.
129. Labiatae
130. Cinchona pubescens, elev. 2000 m.
131. Cinchona pubescens, elev. 2000 m.
132. Cinchona pubescens, elev. 2000 m.
133. Ladenbergia
134. Sample of bark of Cinchona pitayensis from quantity being harvested by Matias Delgado, Quebradilla, Caquiona, Nov. 29, 1943

FOREIGN ECONOMIC ADMINISTRATION